



Contra Costa College

Contra Costa College

Contra Costa Community College District,
2600 Mission Bell Drive, San Pablo, CA

New Sciences

Building Programming

October 2016

KO DESIGNS

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1 | Introduction

Process

In the Fall of 2015 Contra Costa Community College District requested KO Designs to develop a new Building Project Program for the Sciences Departments: Biological Sciences, Chemistry, Physics & Engineering and Health Sciences, following the conclusion of the Measure E Bond Planning Process. This program document is the result of a series of interactive workshops, meetings and site visits with the Executive Steering Committee (ESC), Expanded Executive Steering Committee, User Groups, and Specialty User Groups. The objectives of these workshops were to gather information on the individual groups and departments to be housed in the new facility and those that will help run and maintain the new facility, to determine the needs of the current and future users, to define the overall proposed program scope of the project, and to document proposed space needs and criteria. During the Process and through studies of space and costs the directive was to move Health Sciences into the Applied Arts and Administration (AA) building and build a new building for Biological Sciences, Chemistry, Physics and Engineering.

Also during the Process the locations of the Anthropology and Geology departments were discussed. Although they are currently located in other buildings on campus not included in this project, it might be considered ideal to co-locate the Sciences and provide Anthropology and Geology labs in the new building.

This document has been prepared to describe the general scope of the project, and establish the Program parameters and criteria for the design of the new science spaces. This program document is a statement of the project's goals, the activities to be accommodated and special requirements and considerations that will guide the design process. Specific requirements have been identified and are interrelated. The design team will be required to distill the stated criteria into design solutions that satisfy the College's needs and College & District design guidelines.

This Program should be considered a starting point of the design process and viewed as a statement of the minimum level of project performance. It is anticipated that more detailed criteria and data will be developed by the design team as the design process evolves. All square footages are to be validated by the Design Team.

Program Summary

The Sciences Program prescribes spaces for: general use classrooms; dedicated class labs for Biological Sciences, Chemistry, Physics, and Engineering; lab service support spaces; a new Planetarium; student read/study/tutorial spaces for the students, the Center for Science Excellence (CSE) and STEM; faculty offices and related support spaces. The project includes the programming of a new Sciences building. During the process and through space and cost studies the directive was to move the Health Sciences into the renovated AA Building. All space allocations and square footages to be validated during the design phase by the Design Team.

New Sciences Building:
35,030 Assignable Square Feet (ASF)
50,000 Gross Square Feet (GSF)

Program Goals

The New Sciences Building will provide state-of-the-art instruction and training lab facilities for Contra Costa College and its community. The goal for this Program document is to establish design criteria for the new spaces that will be replacing the existing facilities. The program will provide significant upgrades from existing facilities and meet the demands of growing programs. This document includes a Space Needs Summary with overall target building areas for each department, Room Data Sheets including specific room requirements, Class Lab Room Diagrams illustrating a concept of that space, and key planning elements that support the Space Needs Summary. The College will be responsible for salvaging all desired furniture, fixtures, and equipment prior to demolition of the existing Science buildings; however coordination of this task will be the responsibility of the selected Design Team.

The Program aims at providing a foundation for a new state-of-the-art Science Hub/Center on the campus designed with spaces that will encourage and promote interaction and foster a welcoming and inviting environment for the students, faculty, and staff, as well as the community. And that will move the College along with the changing times and growing strength in the STEM related fields.

Development of this Program is the first phase for the New Sciences Building. Subsequent design phases will provide specific design and technical information that will lead to the construction of the new sciences spaces.

Participants

CCC Executive Steering Committee

Mojdeh Mehdizadeh	President
Tammeil Gilkerson	Vice-President
Mariles Magalong	Director, Business Services
Jane Harmon	Interim VP
Ray Pyle	District, Chief Facilities Planner
Ines Zildzic	District, Associate Chief Facilities Planner

CCC Expanded Steering Committee

Ghada Al-Masri	Dean NSAS
Susan Lee	Dean LAVA

CCC User Groups

Ellen Coatney	Biology
Deborah Dixon	Biology
Brian Williams	Biology
Leslie Alexander	Chemistry
Eileen Beil	Chemistry
Thuy Dang	Chemistry
Jon Celesia	Physics / Astronomy / Engineering
Jeff Kamalian	Physics
Mark Wong	Physics / Astronomy / Engineering
Seti Sidharta	Center for Science Excellence
Mayra Padilla	STEM

CCC Specialty User Groups

Bruce King
Darlene Poe
James Eyestone
Tom Holt

Buildings & Grounds
Custodial
IT and AV/AT
Campus Safety

Consultants

Ron Johnson
Gordon Beverage
Krista Olson

Critical Solutions, PM
TBD, Cost Estimator
KO Designs, Programmer

Preliminary Project Milestones

Pre-Design & Programming	September/October 2016
Schematic and Design Development	October 2016 – July 2017
Construction Documents	August, 2017 – April, 2018
DSA Review & Approval	April 2018 – October 2018
Bid Phase (w/ Board Approval)	October 2018 – January 2019
Abate & Demo LA & HS (start after AA Reno occupancy)	July – December 2018
Construction (Science Building)	January 2019 – December 2020
Move-In & Occupancy	December, 2020 – January 2021

Referenced Documents

CCC Master Plan, Perkins + Will, March 7, 2008
CCC Educational Master Plan 2007-2017, May 2007
CCC State Space Inventory Report 17, Certificate of Inventory for Fiscal Year: 2015-2016
CCCCD 2016-20 Five Year Capital Outlay Plan, printed 11/23/2014
CCCCD Educational Planning Report, November 2010
CCC Applied Arts & Administration Building Plans, tBP Architecture, Preliminary Design, May 23 2005
District Supplied Existing Floor Plans

Workshops & Meetings

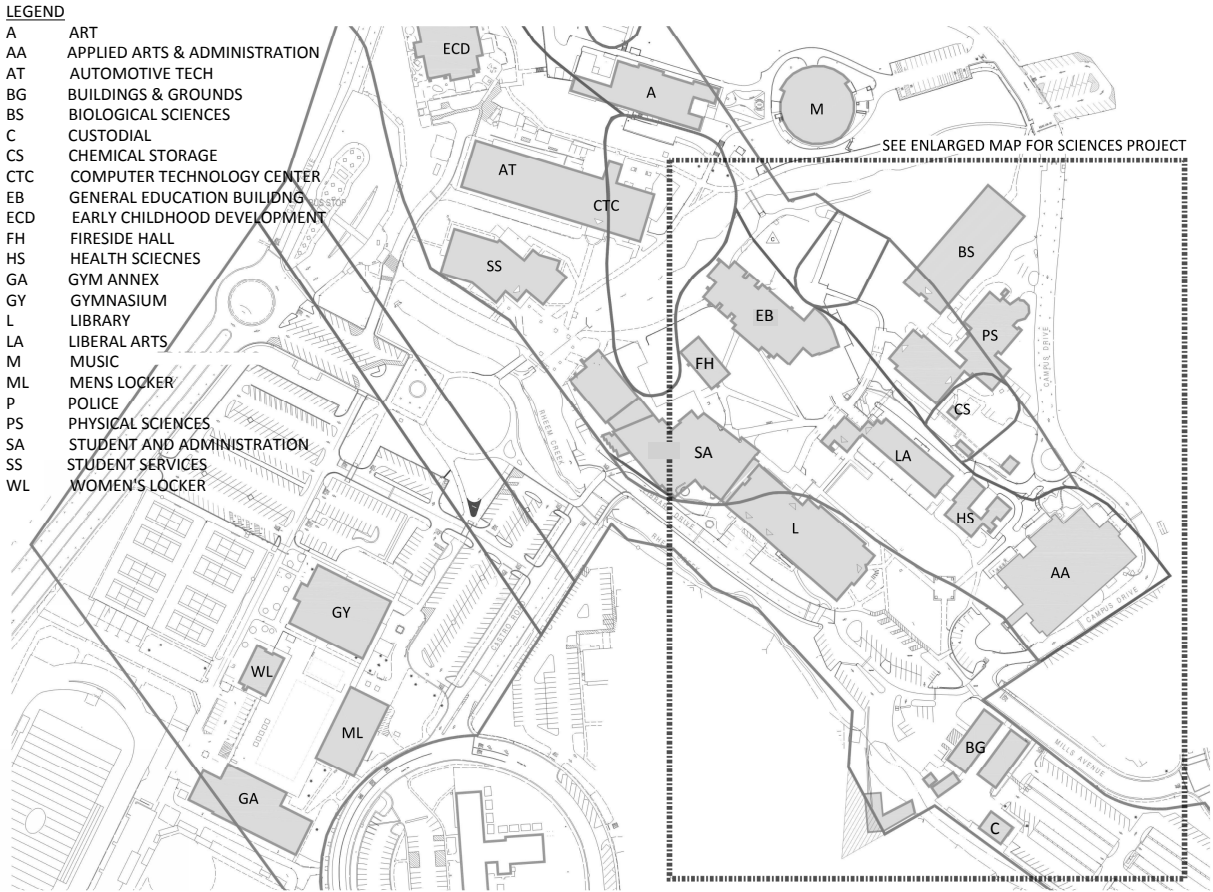
Groups		Department	Contact
User Groups:		Biology	Dr. Ghada Al-Masri
		Chemistry	Dr. Ghada Al-Masri
		Physics & Engineering	Dr. Ghada Al-Masri
		Nursing/CAN	Dr. Susan Lee
		Medical Assisting	Dr. Susan Lee
		EMT	Dr. Susan Lee
		Center for Science Excellence STEM	Seti Sidharta Dr. Mayra Padilla
Specialty Groups:			
	Campus IT & AV/TV	James Eyestone	
	Campus Safety	Tom Holt	
	B&G/Custodial	Bruce King	

MTG.	Date	Time	Location	Department
WkShp 1	11/6/2015			User Groups Mtg. #1
		9:00 a.m. - 10:00 a.m.	PS-107	Biology Department
		10 a.m. - 11 a.m.	AA Bldg.	Walked existing Culinary Department w/ Bruce
		Noon - 1:00 p.m.	PS-19	Physics/Engineering Departments
		1:00 p.m. - 2:00 p.m.	HS-100	Nursing
	11/11/2015			
		3:00 p.m. - 4:00 p.m.		Chemistry Department
ESC	11/16/2015			
		3 p.m. - 4.30 p.m.	District Of. 1st Flr.	ESC
ESC	12/16/2015			
		3 p.m. - 4.30 p.m.	B&G Conf. Rm.	ESC & Expanded
WkShp 2	1/22/2016	Friday		User Groups Mtg. #1
		9:00 a.m. - 10:00 a.m.	AA 216	James Eyestone - IT & AV/TV
		10:15 a.m. - 11:15 a.m.	AA 216	EMT - Rick Ramos
		Noon - 1:00 p.m.		<i>break</i>
		1:15 p.m. - 2:15 p.m.	AA 216	Medical Assisting - Julie Shieh-Cook
		2:30 p.m. - 3:30 p.m.	AA 216	Nursing - Cheri - Mtg. #2
	2/2/2016	Tuesday		User Groups Mtg. #1
		11am - noon	L 212	Dr. Susan Lee, Dean of LAVA
		1:00 p.m. - 2:00 p.m.	LA 102	Campus Safety (Police Services)
		2:15 p.m. - 3:15 p.m.	PS 132	Chemistry - Mtg. #2
		3:30 p.m. - 4:30 p.m.	AA 142	B&G / Custodial
	2/5/2016	Friday		Mtg. #2
		1:15 p.m. - 2:15pm	PS 19	Physics/Engineering
		2:30 p.m. - 3:30pm	PS 19	Biology

WkShp 3	2/24/2016	Wednesday		
		Noon - 1:00 p.m.	AA-216	Mtg. w/ Tammiel & Ines - catch-up
	2/26/2016	Friday		
		9:00 a.m. - 10:00 a.m.	AA-216	STEM - Dr. Mayra Padilla
		10:15 a.m. - 11:15 a.m.	CRC	EMT - Scott Weatherby & Susan Lee - Mtg. #2
		11.20 a.m.- 11:55 a.m.		break
		Noon - 1:00 p.m.	PS-107	Physics / Engineering - Mtg. #3
		1:15 p.m. - 2:15 p.m.	CRC	Medical Assisting - Julie Shieh-Cook & Susan Lee - Mtg. #2
		2:30 p.m. - 3:30 p.m.	CRC	Nursing & CNA - Cheri & Joan Batiste - Mtg. #3
		3/1/2016	Tuesday	
		9:00 a.m. - 10:00 a.m.	PS-107	Chemistry - Mtg. #3
		10:00 a.m. - 11:00 a.m.	AA-203	ESC Meeting
	3/3/2016	Thursday		
		12:30 p.m. - 1:30 p.m.	PS-107	Biology - Mtg. #3
ESC	3/16/2016	Wednesday		
		11:30 a.m. - 12:30 p.m.	AA-203	ESC Meeting
ESC	4/13/2016	Wednesday		
		1:00 p.m. - 2:00 p.m.	AA-203	Expanded ESC Meeting
WSCH	4/21/2016	Thursday		
		1:00 p.m. - 2:00 p.m.	AA-203	WSCH mtg. w/ Donna
CSE	4/26/2016	Tuesday		
		10:00 a.m. - 11:00 a.m.	PS-109	Centre for Science Excellence w/ Seti Sidharta
All Users	5/5/2016	Thursday		
		3:00 p.m. - 5:00 p.m.	HS-3	All User Presentation

Project Site

The following diagram was prepared to define the physical boundaries and scope of the project site as well as further define the programmatic requirements. The Design Team will be required to coordinate landscape, site lighting and site development. All site boundaries to be verified.



CONTRA COSTA COLLEGE CAMPUS PLAN





As part of the completion of the Measure A Bond

- The LA building will be vacated allowing for demolition to occur.
- 1/3 of the AA building will be vacated allowing for Health Sciences to move in.
- Once HS has moved out then the site for the New Sciences building will be available.

LEGEND

AA	APPLIED ARTS & ADMINISTRATION
BS	BIOLOGICAL SCIENCES
CS	CHEMICAL STORAGE
EB	GENERAL EDUCATION BUILDING
FH	FIRESIDE HALL
HS	HEALTH SCIENCES
L	LIBRARY
LA	LIBERAL ARTS
PS	PHYSICAL SCIENCES
SA	STUDENT AND ADMINISTRATION

LEGEND

	PROJECT SITE BOUNDARY FOR NEW SCIENCES BLDG.
	BUILDINGS TO BE DEMOLISHED

**NEW SCIENCES PROJECT SITE BOUNDARY
CONTRA COSTA COLLEGE**

2 | Sciences Program

Program Description

The overall goal for the College is to create a new Sciences Hub for the students, faculty and overall campus. There is a real push to expose students to the Sciences and integrate the STEM (Sciences, Technology, Engineering, Mathematics) curriculum into the CCC campus. The programs being planned for the new building are STEM fields: Biological Sciences, Chemistry, Physics and Astronomy fall under "S" Sciences; Biotechnology falls under "T" Technology; and Engineering falls under "E" engineering. Math is housed in the AA building.

The current conditions of the Sciences facilities were assessed during the Campus Wide Planning Phase and it was recommended that existing buildings be replaced rather than renovated. The new facilities to be built with state-of-the-art science labs, classrooms, and supporting spaces. Providing a cohesive Science Hub that will provide spaces that meet the needs of the students, classes/curriculum offered and to increase the number of students involved in the Sciences. The space must be envisioned to accommodate a growing student population and the demands of the 21st century technology and a certain level of flexibility and adaptability.

Classrooms

Currently there are (11) classrooms of varying size located within the existing Sciences buildings. Upon review of the Weekly Student Contact Hours (WSCH) produced by these general lecture spaces (inclusive of the non-science programs that use these classrooms) it appears that the classrooms are underutilized, there is more classroom space than justifiable by the State Standards, approx. 4,600 ASF or 5-6 classrooms over.

However, it must be taken into account that there are High School Programs on the CCC campus, such as Middle College and Gateway that also use the classroom space with CCC however do not generate WSCH. Upon review of the class schedule it is noted that two of the existing classrooms, PS-101 & PS-102 are scheduled solely by Middle College and also use other classrooms along with CCC programs. These programs do not generate WSCH but they need to be accounted for.

At the same time it was noted that EMT and Medical Assisting are currently teaching the Class Lab practicals within Lecture space and not dedicated lab space.

Taking into account the above information the ASF for classroom was decreased by converting Lecture space to Class Lab space leaving the College over on ASF by about 3-4 classrooms which are justified by the High School Programs use.

The following (10) new state-of-the art classroom spaces and (1) new lab space have been programmed to replace the existing (11) Classrooms:

New Building

- Two general use classrooms each with instructional demonstration bench; serving at least 72 students, at least one classroom with a tiered floor
- A general use classroom serving at least 40 students, flat floor
- Three general use classrooms with demonstration bench serving at least 36 students, flat floor

AA Re-purposed Building

- Four renovated general use classrooms, one adjoining the new Nursing Skills Class Lab, see Class Lab below
- A Lecture Space to be converted to Class Lab space for EMT, see Class Lab below

Class Labs

We have been working with the faculty and the current Class Lab sizes are too small and an increased number of stations in the class labs would provide a more effective teaching space while increasing WSCH, and in some cases increasing the number of Class Labs; at the same time reducing some lab support space by efficiencies gained with the proper adjacencies and layout. The current lab and lab service layouts/adjacencies or lack of, constrain how the faculty and lab technicians teach, work, and are able to set up and take down for student practicals.

General Class Lab Information

- The existing science class labs are built to accommodate (24) students. Per User Groups the class sizes range upward of 24 and the extra students are accommodated by seating at the edges and sharing stations. In order to help increase utilization and accommodate class sizes Class Lab sizes have been increased to (30) student stations.
- It should be noted that all of the programs/departments within this document are very equipment intensive and the Design Team will be responsible to account for and accommodate for - space, electrical, lighting needs, network etc.
- Microbiology has requested that (28) student stations be considered for the maximum number of students due to the nature of the experiments being done and the ability to oversee all at once.
- Physics and Engineering have requested that the number of stations be considered to remain at (24) due to the nature and size of the experiments being done and the ability to oversee all stations at once.
- Additional program information and criteria may be found in the Room Data Sheets.
- Chalk boards vs. White-boards - Different programs have different preferences.

Biology - Per the Fall 2015 WSCH/ASF Analysis

- Overall Biological Sciences has more lab space than is justifiable by the overall WSCH produced. Upon review of the WSCH by class and verification of current usages of the existing building spaces this program document recommends adding (1) additional Anatomy/Physiology Class Lab while decreasing the lab support square footage for Biotech & Microbiology due to adjacencies that can be accomplished in the new building.
- Anatomy & Physiology are pretty much maxed out in their current lab space. Currently they occupy 2,978 ASF total including support spaces. They produce enough WSCH to justify 2,227 ASF, which is very close to meeting State Standards. In order to increase their WSCH more Class Lab space is needed.
- General & Major Biology currently produce enough WSCH to justify 1,512 ASF equivalent to a (30) station lab
- Both are justifications for increase in number of student stations per lab.
- Microbiology and Biotechnology each produce less than enough WSCH to justify one lab. It is recommended that these class sizes be reviewed and validated once again. It is understood that each of these programs require dedicated labs because they each have very specialized equipment.

Chemistry - Per the Fall 2015 WSCH/ASF Analysis

- Overall Chemistry has more lab space than is justifiable by the WSCH produced. However General Chemistry class lab PS-05 is less desirable to teach in due to the type of lab benches and location, across the hall from the Chemistry Stock room. If the class lab were adjacent to the Stock room and had student benches similar to

PS-06 & 14 the lab would be utilized more.

- PS-06 & PS-14 both produce sufficient WSCH to justify an increase in the number of student stations per lab.
- Adjacencies between the Class Labs and the Lab Technician Lab Prep Area are extremely important, the shorter the distance to travel with the set-ups, which include glass equipment and chemicals, the better, and no crossing of traffic circulation paths such as hallways.

Physics / Engineering - Per the Fall 2015 WSCH/ASF Analysis

- Overall Physics and Engineering are right on par with how much WSCH they produce to how much space they occupy together, however the Engineering Department is growing and soon will max out the space.
- Currently Physics and Engineering share one class lab and all support service spaces.
- The Department would like to grow and the Engineering Program has just hired a Full-time Engineer Faculty Member.
- This program document recommends adding (1) additional Physics/Engineering Class Lab for a total of (2) Class Labs.
- An additional specialty class lab space has been requested by the department, a smaller (10) station "Makers Lab". Currently ASF has not been allocated within the Program Document for this space; which could be accommodated ASF wise if the two class lab station numbers were reduced to (24) freeing up the ASF for a Makers Lab. To be reviewed by Design Team.

The following Labs are proposed:

- A General Biology Class Lab serving 30 students with built-in workbenches and adjacent lab support spaces for class lab prep and equipment storage.
- A Biotech (BSL-2) Class Lab serving 30 students with fume hoods, movable workstations and an adjacent Cell Culture Clean Specialty Lab with Laminar Flow Hoods. Program shares lab support services with Microbiology.
- A Microbiology Class Lab serving 30 students with Bio-Safe fume hoods, built-in workbenches and adjacent Media lab support space for microorganism sterilization which is part of the shared prep lab of Biotech. Caution of using water sprinklers in areas with Microorganisms - review codes.
- A Physiology Class Lab serving 30 students with either built-in or movable workbenches and adjacent lab support spaces for class lab prep and equipment storage shared with Anatomy.
- An Anatomy Class Lab serving 30 students with either built-in or movable workbenches and an adjacent Cadaver Specialty Lab with space for three gurneys and code compliant ventilation along with support spaces for class lab prep and equipment storage shared with Physiology.
- Biological Sciences Lab support spaces include Lab Technician Prep space with lots of equipment, refrigerators, supplies, models and much more; storage space for microscopes, glass equipment, models etc. Specific for each type of program space.
- An Introduction to Chemistry Lab serving 30 students with fume hoods and built-in workbenches, and adjacent lab support spaces shared with the other Chemistry Labs.
- A General Chemistry Lab serving 30 students with fume hoods and built-in workbenches, and adjacent lab support spaces shared with the other Chemistry Labs.
- An Organic Chemistry Lab serving 30 students with built-in workbenches and an

adjacent Instrument Specialty Lab along with lab support spaces shared with the other Chemistry Labs.

- Chemistry Lab support spaces include Chemistry Stock Room with provisions for fume hood, a sink, chemical clean, chemical storage, glass equipment storage and more. Space for refrigerators, equipment storage.
- A Physics Lab serving 30 students with built-in workbenches and adjacent lab support spaces.
- A Physics/Engineering Lab serving 30 students with a fume hood, built-in workbenches and adjacent lab support spaces. With a requested "Makers Lab".

Additional Lab Spaces Requested

- A Physics/Engineering Lab "Makers Lab" with (10) stations.
- A dedicated Sciences Computer Lab with (30) student stations.
- Emergency back-up generator required for biological and chemical storage.

Planetarium

A new Planetarium will be provided. Users have suggested having the planetarium integrated into the top floor of the new building adjacent to a roof deck for star gazing. 1,550 ASF has been provided for the new learning space, this should include the auditorium itself along with an adjacent prep room to store equipment needed for demonstrations and space to set up prior to lecture. Lastly, a secure storage space adjacent to the roof deck to be provided for storing portable telescopes.

Read/Study Spaces

Currently within the existing Physical Sciences Building Independent Study Hall PS-107 makes up the majority of the Sciences Read/Study space, however it is not the most affective use of the space. One half has about 30 computer stations and the other half is table & chairs for open study. The space is also used by Engineering to teach AutoCAD, MATLAB, and to teach programming courses.

Also in the Biological Sciences building room B4 is another student study area. It is used for group study and tutorial services.

For Programming purposes 1,900 ASF has been allocated for Read/Study spaces. It is up to the Design Team to work with the User Groups during the Program Validation / Schematic Design Phase to appropriate the square footage as needed to meet the students' needs while validating appropriate staffing requirements can be met, and incorporate those spaces into the floor plans being designed.

The following ideas have been discussed as possible future read/study spaces:

- Open study area, smaller than current but with interactive projector similar to current equipment along with smaller shared study areas
- Computer stations
- Tutorial rooms with movable tables & chairs, white boards, and lockable equipment storage for such items as microscopes and slides for student use during study time
- Explore creating a dedicated Sciences Computer Class Lab, (30) Stations

Center for Science Excellence & STEM

The Center for Science Excellence is a tutorial program that serves the students by helping them find tutors, transcripts, and more. It contains a quiet area with tables and chairs and space for four computers. It is a great support service.

H.S.I STEM (Science, Technology, Engineering & Math) is a grant program that encourages and helps students get into and stay in the Sciences while excelling. It is a great support service.

Currently the Center for Science Excellence and STEM (Science, Technology, Engineering & Math) are located in two different buildings. The College would really like to see the

two departments come together to create a science hub for the campus. It could be very beneficial to the students and the two programs to be co-located. It would also be nice to see the main Read/Study area be adjacent to and part of the Science Hub, these spaces are to be defined by the Design Team.

Office Space

Full-time faculty will be given a private office of 90 ASF.

A shared work space with multiple shared workstations to be provided for the Part-time faculty.

Copy/File storage/Faculty mailboxes areas to be provided.

These spaces are to be defined by the Design Team

Faculty Lounge

A faculty lounge/break room to be provided. A space away from the smells and chemicals of the labs.

Meeting Rooms

Meeting rooms are to be provide, number, size and location to be determined by design team.

Observation Deck

Roof-top access for astronomy courses.

Hazardous Chemical Storage

Currently any hazardous material is stored in the stand alone Chemical Storage Building located just south east of the lower portion of the Physical Sciences Building. The Program Document accounts for new hazardous storage space. The hazardous material is picked-up once a year.

IT

See Districtwide Technology Infrastructure Standard - Revision 02.30, Jan. 2016 in the Appendix. MPOE, BDF, and/or IDF rooms to be determined depending on building size and length and placement of IT rooms.

Custodial

Janitor closets to be provided on each floor, equipped with a floor sink.

Emergency Power

Emergency generator required as back-up power for refrigerators and freezers storing biological and chemical substances.

EXECUTIVE SUMMARY - WSCH / ASF ANALYSIS

LECTURE / LAB SUMMARY

SCIENCES SUMMARY

	WSCH Produced Fall 2015	Justifiable ASF from WSCH	(E) Lecture ASF	Delta btw. (E) ASF & Justifiable	Proposed ASF*	Delta btw. Proposed & Justifiable	Delta btw. Proposed & (E)
LECTURE SUMMARY							
BS Bldg.	3954.91	1,871	3,965	2,094			
PS Bldg.**	2832.36	1,340	3,385	2,045			
HS Bldg.	2370.92	1,121	2,901	1,780			
Total	9158.18	4,332	10,251	5,919	9,709	5,377	-542

	WSCH Produced Fall 2015	Justifiable ASF from WSCH	(E) Lab & Service ASF	Delta btw. (E) ASF & Justifiable	Proposed ASF	Delta btw. Proposed & Justifiable	Delta btw. (E) & Proposed
LAB SUMMARY							
Biology	1948.17	4,578	9,516	4,938	10,945	6,367	1,429
Chemistry	1106.80	2,844	5,267	2,423	6,050	3,206	783
Physics	449.20	1,154	1,914	760	2,025	871	111
Engineering	52.70	169	0	-169	1,560	1,391	1,560
Nursing / CNA	444.76	952	1,791	839	2,870	1,918	1,079
Medical Assisting	127.10	272	299	27	740	468	441
EMT	225.48	483	216	-267	1,545	1,062	1,329
Total	4354.22	10,453	19,003		25,735		6,732

*Includes General Classroom spaces in New Sciences Bldg. & Relocated spaces to AA bldg.

**Planetarium included under Lecture 100 Space

**SCIENCES SPACE NEEDS VALIDATION
SPACE NEEDS SUMMARY BY ROOM TYPE**

Date Updated: 6/7/2016

ROOM TYPE	Existing Sciences*	New Sciences	Health Sciences AA Bldg.	Total New / Renovated Science ASF
100 SPACE				9,709
110 Classroom	10,107	6,980	2,629	
115 Classroom Service	144	100	0	
200 SPACE				25,785
210 Class Lab	12,493	15,600	3,435	
215 Class Lab Service	5,504	4,180	1,130	
220 Special Class Lab	873	850	470	
225 Special Class Lab Service	0	0	120	
300 SPACE				4,860
310 Office	4,301	2,290	1,130	
315 Office Service	955	750	200	
350 Conference Room	0	490	0	
400 SPACE				3,300
410 Read/Study Room	3,247	3,180	120	
600 SPACE				120
650 Lounge	0	120	0	
680 Meeting Room	0	0	0	
700 SPACE				490
730 Storage	623	490	0	
TOTAL ASSIGNABLE AREA (ASF)	38,247	35,030	9,234	44,264
EFFICIENCY FACTOR	75%	70%	N/A	
TOTAL GROSS AREA (GSF)	51,067	50,000	N/A	

*Includes existing Biological Sciences, Physical Sciences and Health Sciences Buildings

Non-Assignable Spaces

- IT rooms - MPOE/IDF/BDF - size and location per CCCC and CCC information technology guidelines.
- Janitor Closets - at least one per floor
- Janitorial Storage - Space to store specialty equipment such as machine to clean floor

ALL ASF TO BE VALIDATED BY DESIGN TEAM DURING SPACE PLANNING

**SCIENCES SPACE NEEDS VALIDATION
SPACE NEEDS SUMMARY BY DEPARTMENT**

Date Updated: 6/7/2016

Dept.	Room Type	New Sciences ASF	Sub Totals	Health Sciences AA ASF	Sub Totals	Comments
Shared / General Assignment			8,720		2,749	
110	Class Lecture	5,480		2,629		(6) & (4) General Classrooms of varying sizes
115	Class Lecture Service	100		0		
315	Office Space	510		0		Copy/File Storage Space
350	Meeting Space	490		0		
410	Read/Study Space	2,020		120		
650	Lounge	120		0		
Center for Science Excellence + STEM Hub			1,250		0	
310	Office Space	90		0		
410	Reading/Study Room	1,160		0		
Dean, NSAS			280		0	
310	Office Space	280		0		
Biology, General			2,030		0	
210	Class Laboratory	1,560		0		(1) 30 station lab
215	Class Laboratory Service	470		0		
310-315	Office Space	950		0		Office Space for All Biological Sciences
Biotechnology and Biomedical Technology			1,860		0	
210	Class Laboratory	1,560		0		(1) 30 station lab
215	Class Laboratory Service	0		0		Shares w/ Microbiology
220	Special Class Laboratory	300		0		
310-315	Office Space	0		0		See Biology, General
Microbiology			2,480		0	
210	Class Laboratory	1,560		0		(1) 30 station lab
215	Class Laboratory Service	920		0		
310-315	Office Space	0		0		See Biology, General
Anatomy and Physiology			4,575		0	
210	Class Laboratory	3,120		0		(2) 30 station labs
215	Class Laboratory Service	1,455		0		
310-315	Office	0		0		See Biology, General
Physics & Engineering			4,235		0	
210	Class Laboratory	3,120		0		(2) 30 station labs
215	Class Laboratory Service	465		0		
310-315	Office	650		0		

Dept. Room Type	New Sciences ASF	Sub Totals	Health Sciences AA ASF	Sub Totals	Comments
Planetarium		1,550		0	
110-115	Class Lecture	1,500	0		
215	Class Laboratory Service	50	0		
Chemistry, General		7,100		0	
210	Class Laboratory	4,680	0		(3) 30 station labs
215	Class Laboratory Service	820	0		
220	Special Class Laboratory	550	0		
310-315	Office	560	0		
730	Storage	490	0		Hazardous Chemical Storage
Nursing		0		4,080	
210	Class Laboratory	0	1,600		(1) 30 station lab
215	Class Laboratory Service	0	680		
220	Special Class Laboratory	0	470		Simulation Labs
310	Office	0	1,130		
315	Office Service	0	200		
Medical Assisting		0		740	
210	Class Laboratory	0	540		
215	Class Laboratory Service	0	200		
310-315	Office	0	0		See Nursing
Emergency Medical Services (EMT)		0		1,545	
210	Class Laboratory	0	1,295		
215	Class Laboratory Service	0	250		
310-315	Office	0	0		See Nursing
Total ASF		35,030	9,114		
Efficiency Factor		70.1%	N/A		
TOTAL GROSS AREA (GSF)		50,000	N/A		

ALL SPACE ALLOCATIONS TO BE VALIDATED BY DESIGN TEAM DURING SPACE PLANNING

SPACE NEEDS VALIDATION

				Existing		New Sciences Building					
Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments		
1.0 Shared / General Assignment						11,007	7,720				
Room Use - Classroom				Sub Total ASF		8,985	Sub Total ASF		5,480		
BS	12	110	Lecture	72	1,295		72	15	1,080		Tiered floor, with demonstration bench with water, gas and air at front for instructor, with secure storage for equipment and chemicals. (2) 72 stn. lecture halls requested by Chemistry & Biology
HS	101	110	Lecture	100	1,258		72	20	1,440		Same as comment above.
HS	1	110	Lecture	40	992		40	20	800		Nursing requested 40 seat classroom
PS	106	110	Lecture	60	896		36	20	720		(3) 36 stn. Classrooms requested by Biology; (2) 30-32 stn. Classrooms requested by A.E.P.G.
BS	8	110	Lecture	36	700		36	20	720		See comment above
BS	7	110	Lecture	40	675		36	20	720		See comment above
BS	2	110	General Lecture	60	1,295				0		Convert to Shared Lab/Lecture space for EMT & Medical Assisting
HS	3	110	Lecture	40	651				0		Move to AA
PS	113	110	Lecture	25	475				0		Move to AA
PS	101	110	Lecture	15	374				0		Move to AA
PS	102	110	Lecture	15	374				0		Move to AA
Room Use - Lecture Service				Sub Total ASF		0	Sub Total ASF		100	Comment	
		115	Future Lecture Demonstration Lab Storage		0			100			Storage for Demonstration equipment, needed if located on a different floor from the lab technician
Room Use - Read/Study				Sub Total ASF		2,022	Sub Total ASF		2,020		
BS	45	410	Biology Student Read / Study	0	350						Tutorial room for all biology classes. Has microscopes and slides for student use during study time, a white board and tables and desks. Used frequently by students
HS	105	410	Student Nursing Read Study	15	272						Nursing - Student computer lounge
PS	107	410	Sciences & Math Independent Study	51	1,400						Independent Study Lab - Used by all Sciences and Math. Currently scheduled by Dean of NSAS's assistant.
		410	Science Computer Lab				30	34	1,020		30 station shared Sciences dedicated instructional computer lab - to be decided during design
		410	Student Read/Study Spaces						1,000		- Shared student read/study space with computers and table chair seating; explore shared space on each floor, how would it be overseen. - Some space to be adjacent to CSE. - Current space has an interactive projector and draw on white board that only cost \$1,500 – works great.
Room Use - Lounge				Sub Total ASF		0	Sub Total ASF		120		
		650	Staff Lounge						120		A place to eat away from chemicals and bio hazard

Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments
2.0 Center for Science Excellence + STEM Hub						1,295			1,250
Room Use - Read/Study Room				Sub Total ASF		Sub Total ASF		1,250	
PS	109 A	410	Computer Lab	4	325	1	280	280	Adjacent to Student Read/Study Space
PS	109 B	410	Open Tutorial	0	300	1	280	280	
PS	111	310	Director office	1	70	1	90	90	Adjacent to Computer lab and open space
AA		410	STEM addition	1	600	1	600	600	Making space for STEM to help create a Science Hub
BIOLOGICAL SCIENCES						9,516			10,945
3.0 Biology, General						1,886			2,030 Would like all Biological Sciences departments located on one floor
Room Use - Class Lab				Sub Total ASF		Sub Total ASF		1,560	
BS	24	210	General Biology Lab	25	1,295	30	52	1,560	Adjacent to Model storage, General Biology Prep Lab; Chalk boards <i>General & Major's biology lab; holds equipment for multiple classes, such as slides, models, tanks for growing plants. 3 Bio-labs taught in lab</i>
Room Use - Class Lab Service				Sub Total ASF		Sub Total ASF		470	
BS	6	215	Storage	0	80			-	Large -80 C freezer used for storage of bacterial stock samples and cell samples for cell culture in biotechnology. Currently the piece of equipment is not in use. Along with other lab equipment.
BS	16	215	General Biology Technician Office	1	350			-	Staff: J. Boswell Office plus storage
BS	16 B	215	Microscope Stor.	0	35			-	
BS	28	215	Model Storage	0	126				
		215	Model Storage			1	110	110	Adjacent to General Biology Class Lab
		215	General Biology Prep Lab			1	250	250	Adjacent to General Biology Class Lab and Lab Technician office
		215	Common Chemical & Glass Storage			1	110	110	Long and narrow works best, with storage on either side - one for chemical stocks the other for general glassware, room to roll a cart in fill up and roll out, secure space. Common storage for all Biological sciences to use - will help regulate and keep track of equipment. Access from common hallway. Centrally

Dept.	Rm No.	Rm Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments	
Biotechnology and Biomedical Technology					2,431	1,860 Adjacent to Microbiology				
Room Use - Class Lab				Sub Total ASF		Sub Total ASF		1,560		
BS	18	210	Biotech Lab	30	1,295	30	52	1,560	Lecture/lab in this room - moveable furniture, fume hood, projector. Adjacent to Lab technician office, Lab prep and Model storage. Close to, across the hall from Faculty Offices	
Room Use - Class Lab Service				Sub Total ASF		Sub Total ASF		0	See Microbiology Lab service. Departments share lab technician & lab prep.	
BS	22	210	Biotech Lab	10	940				See Microbiology Lab service - share lab service and lab tech.	
Room Use - Special Class Lab				Sub Total ASF		Sub Total ASF		300		
BS	28	A	220	Cell Culture Clean Room	2	196	10	30	300	Adjacent to Biotech Lab: Requires Laminar Flow Hoods; currently there are 3 hoods and there should be 5 total to fit the whole class
Microbiology					2,221	2,480 Adjacent to Biotech				
Room Use - Class Lab				Sub Total ASF		Sub Total ASF		1,560		
BS	21	210	Microbiology Lab	24	1,295	30	52	1,560	Built-in fixed student bench stations preferred	
Room Use - Class Lab Service				Sub Total ASF		Sub Total ASF		920		
BS	15	215	Media Prep Lab	0	350	1	350	350	Shared with Biotech. Locate between and adjacent to Biotech Lab and Microbiology prep lab	
BS	17	215	Microbiology Prep lab	0	450	1	450	450	Inoculation Lab	
BS	19	215	Microbiology Lab Storage	0	126	1	120	120	Adjacent o Microbiology lab. Disposable medical plastics storage	
Anatomy and Physiology					2,978	4,575				
Room Use - Class Lab				Sub Total ASF		Sub Total ASF		3,120		
BS	39	210	Anatomy Lab	24	1,295	30	52	1,560	Adjacent to Cadaver Lab and prep Lab	
BS		210	Physiology Lab			30	52	1,560	Adjacent to Physiology equipment room and Prep Lab	
Room Use - Class Lab Service				Sub Total ASF		Sub Total ASF		1,455		
BS	29	215	Cadaver Lab	0	665	2	330	660	Adjacent to Anatomy Class Lab	
BS	33	215	Anatomy & Physiology Prep lab	0	665	1	575	575	Adjacent to Anatomy Class Lab and Physiology class lab and equipment room	
BS	41	215	Physiology Equipment Room	0	220	1	220	220	Adjacent to Physiology Class Lab and Prep Lab	
Room Use - Storage				Sub Total ASF		Sub Total ASF		0		
BS	43/47	730	Storage	0	133			0	Currently used to store computers. Department in process of trying to upgrade and get rid of large computers. Space not planned for future.	

Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.Sq. Ft.	Comments	
Physics & Engineering					3,180					5,135
Physics & Engineering					1,914					3,585 Adjacent to Planetarium; would prefer to be on Top floor with roof deck to view stars
Room Use - Class Lab				Sub Total ASF		1,326	Sub Total ASF		3,120	
PS	19	210	Physics Lab	24	1,326	30	52	1,560	6 Fixed workbenches with 4-5 student stations each; secure storage at perimeter of room for equipment storage	
PS		210	Engineering Lab - Future			30	52	1,560	6 Fixed workbenches with 4-5 student stations each	
		210	Future Maker-Lab - Future			10	0	0	Makers-Lab - to be decided during Design phase	
Room Use - Class Lab Service				Sub Total ASF		588	Sub Total ASF		465	
PS	15	215	Lab Equipment Storage	0	190	1	190	190	Lab Equipment Storage	
PS	17	215	Tech Workshop	0	266	1	275	275	A.P.E.G. lab prep / workshop; have student workers	
PS	104	215	Lab Prep & Equipment Storage	0	132			0	See Shared Classroom services	
Planetarium					1,266					1,550 Would like to see Planetarium integrated into building, on top floor adjacent to Physics Department
Room Use - Lecture				Sub Total ASF		1,266	Sub Total ASF		1,500	Adjacent to Independent Computer Lab
PS	132	110	Planetarium	80 40	1,122	72		1,500	Space to be reviewed and divided up as needed by project architect during design phase.	
PS	130	115	Planet. Prep Lab	0	144			0	Lecture Prep for Planetarium	
Outdoor Space									50	
		215	Telescope Storage					50	Secure storage for telescopes	
			Roof Deck						Access to roof deck for viewing stars with telescopes	

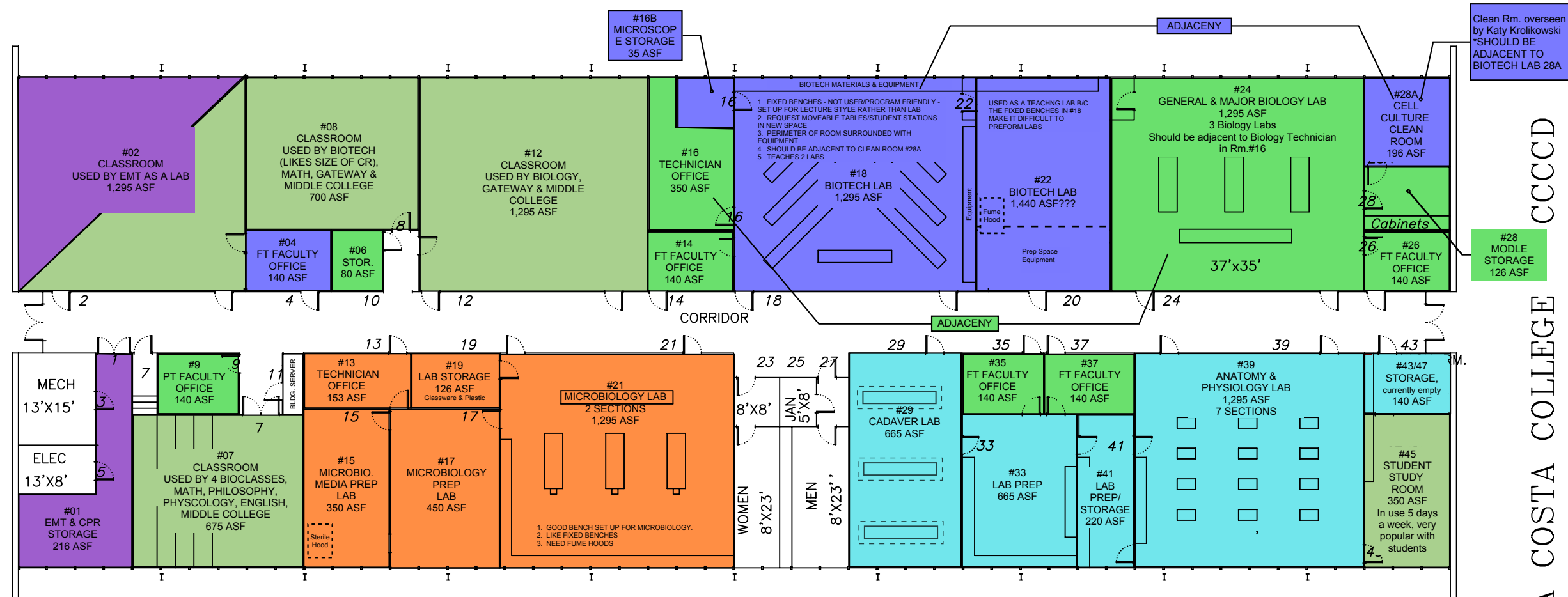
Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments
Chemistry, General					5,757	6,540			
Room Use - Class Lab				Sub Total ASF		Sub Total ASF		4,680	
PS	5	210	General Chem Lab	32	1,326	30	52	1,560	General Chemistry II Lockers required
PS	6	210	Organic Chem Lab	24	1,326	30	52	1,560	General Chem. I & Organic Chemistry Lockers required
PS	14	210	Intro. to Chem Lab	24	1,326	30	52	1,560	Intro to Chemistry Lockers required
Room Use - Special Class Lab				Sub Total ASF		Sub Total ASF		550	
PS	1	220	Chemistry Instrument Lab	40	551	10	55	550	Require Hood for ventilation & sink. Students run experiments within this room - needs to be separate from the chemistry class lab room. Move equipment from Chem Lab #5 into this room.
Room Use - Class Lab Service				Sub Total ASF		Sub Total ASF		820	
PS	2	215	Chemistry Storage	0	150				
PS	4	215	Chemistry Equipment Storage	0	189				
PS	12	215	Chemistry Stock Room Lab	0	399			500	Requires fume hood & sink
		215	Chemistry Equipment Lab					320	Houses machines & chemical refrigerators; Need space that can act as a dark room
Room Use - Storage				Sub Total ASF		Sub Total ASF		490	Walked existing site - (e) bldg. has an approx. 25' x 20' footprint
CS	1	730	Entry Vestibule	0	90	0		90	Existing dwgs & FUSION information is incorrect
CS	2	730	Acid Storage	0	70	0		70	
CS	3	730	Flammable Storage	0	190	0		190	
CS	4	730	Hazardous Storage	0	140	0		140	

Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments
Office Space					2,307		2,440		
Dean, NSAS					240		Adjacent to Faculty Offices		
Room Use - Office				Sub Total ASF		Sub Total ASF		280	
PS	115	310	Dean's Office	1	160	1	160	160	Dean of NSAS - FT
PS	116	310	Dean's Assistant	2	80	1	120	120	Assistant to the Dean, has 2 student workers that need stations in her office
Biology, General					981		Same floor and integrated into layout of Bio Sciences labs		
Room Use - Office				Sub Total ASF		Sub Total ASF		950	
BS	4	310	Full-Time Biology/Biotechnology Faculty	1	140			-	
BS	9	310	PT Faculty Office	1	128			-	
BS	13	310	Micro & Biotech Technician Office	1	153			-	
BS	14	310	FT Faculty Office	1	140			-	
BS	26	310	FT Faculty Office	1	140			-	
BS	35	310	FT Faculty Office	1	140			-	
BS	37	310	FT Faculty Office	1	140			-	
BS		310	Full-Time Biology Faculty Office					90	Close to General Biology Class Lab
BS		310	Full-Time Biology Faculty Office					90	Close to General Biology Class Lab
BS		310	Full-Time Biology Faculty Office					90	Close to General Biology Class Lab
BS		310	Full-Time Microbio. Faculty Office					90	
BS		310	Full-Time Biology/Biotech Faculty					90	
BS		310	Part-Time Shared Faculty Office					150	
BS		310	General Biology Tech Office					90	Adjacent to General biology lab and prep lab; Close to Common Storage
BS		310	Microbiology & Biotech Tech Office					90	
BS		310	Anatomy & Physiology Tech Office					90	
		315	Office Storage					80	

Dept.	Rm No.	Rm. Use#	Room Name	No. Stn.	Assgn.Sq. Ft.	No. Stn.	Stn. ASF	Assgn.S q. Ft.	Comments
Physics & Engineering Adjacent to other faculty departments									
Room Use - Office				Sub Total ASF		Sub Total ASF			
				408		650			
PS	13	310	Storage/Desk	2	88				
PS	122	310	PT Office	1	80				
PS	123	310	FT Office	1	80				
PS	124	310	PT Office	1	80				
PS	127	310	FT Office	1	80				
PS		310	FT Office			1	90		Physics Faculty
PS		310	FT Office			1	90		Physics Faculty
PS		310	Future PO			1	90		Future FT Engineering Faculty
PS		310	Future PO			1	90		Future FT Engineering Faculty
PS		310	PT Shared Office				120		Shared PT Faculty Possibility of sharing with Chemistry PT faculty
PS		310	Lab Technician Office			1	90		Move square footage to Lab Prep
		315	Storage				80		
Chemistry, General Adjacent to other faculty departments									
Room Use - Office				Sub Total ASF		Sub Total ASF			
				678		560			
PS	8	310	Office	2	99				
PS	10	310	Office	1	99				
PS	119	310	Office	1	80				
PS	120	310	Office	1	80				
PS	121	310	Office	1	80				
PS	126	310	Office	1	80				
PS	128	310	Office	1	80				
PS	129	310	Office	1	80				
PS		310	Faculty Office			1	90		
PS		310	Faculty Office			1	90		
PS		310	Faculty Office			1	90		
PS		310	Shared PT Office				120		6 part-time faculty Possibility of sharing with Physics PT faculty
PS		310	Lab Technician Office			1	90		
		315	Storage				80		
Shared Office Space									
Room Use - Office Service				Sub Total ASF		Sub Total ASF			
				955		1,000			
PS	110	315	Mail / Copy /Storage	0	250				
PS	110 A	315	Office Storage	0	250				
PS	112	315	Office Storage		200				
HS	106	315	Hallway	10	255				
		315	1st Floor Copy				120		
		315	2nd Floor Copy				120		
		315	3rd Floor Copy				120		
		350	1st Floor Meeting				150		
		350	2nd Floor Meeting				120		
		350	3rd Floor Meeting				220		
		315	Storage				150		
Total				34,017		35,030			

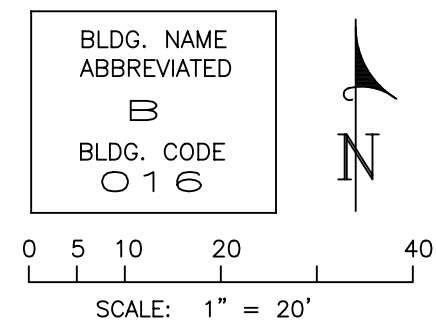
Existing Color Coded Floor Plans by Department

BIOLOGICAL SCIENCE BUILDING FLOOR PLAN



LEGEND
COLOR CODED FLOOR PLAN BY DEPARTMENT

 SHARED / GENERAL ASSIGNMENT	 ANATOMY & PHYSIOLOGY
 NURSING / CNA	 BIOTECH & BIOMEDICAL TECHNOLOGY
 MEDICAL ASSISTING	 PHYSICS & ENGINEERING
 EMERGENCY MEDICAL TECHNICIAN (EMT)	 CHEMISTRY, GENERAL
 BIOLOGY, GENERAL	 CENTER FOR EXCELENCE IN SCIENCE
 MICROBIOLOGY	



FLOORPLN/Cccbio1f
 ALL DIMENSIONS ARE APPROXIMATE
 9/02

Clean Rm. overseen
 by Katy Krolkowski
 *SHOULD BE
 ADJACENT TO
 BIOTECH LAB 28A

CONTRA COSTA COLLEGE CCCCC

3.0

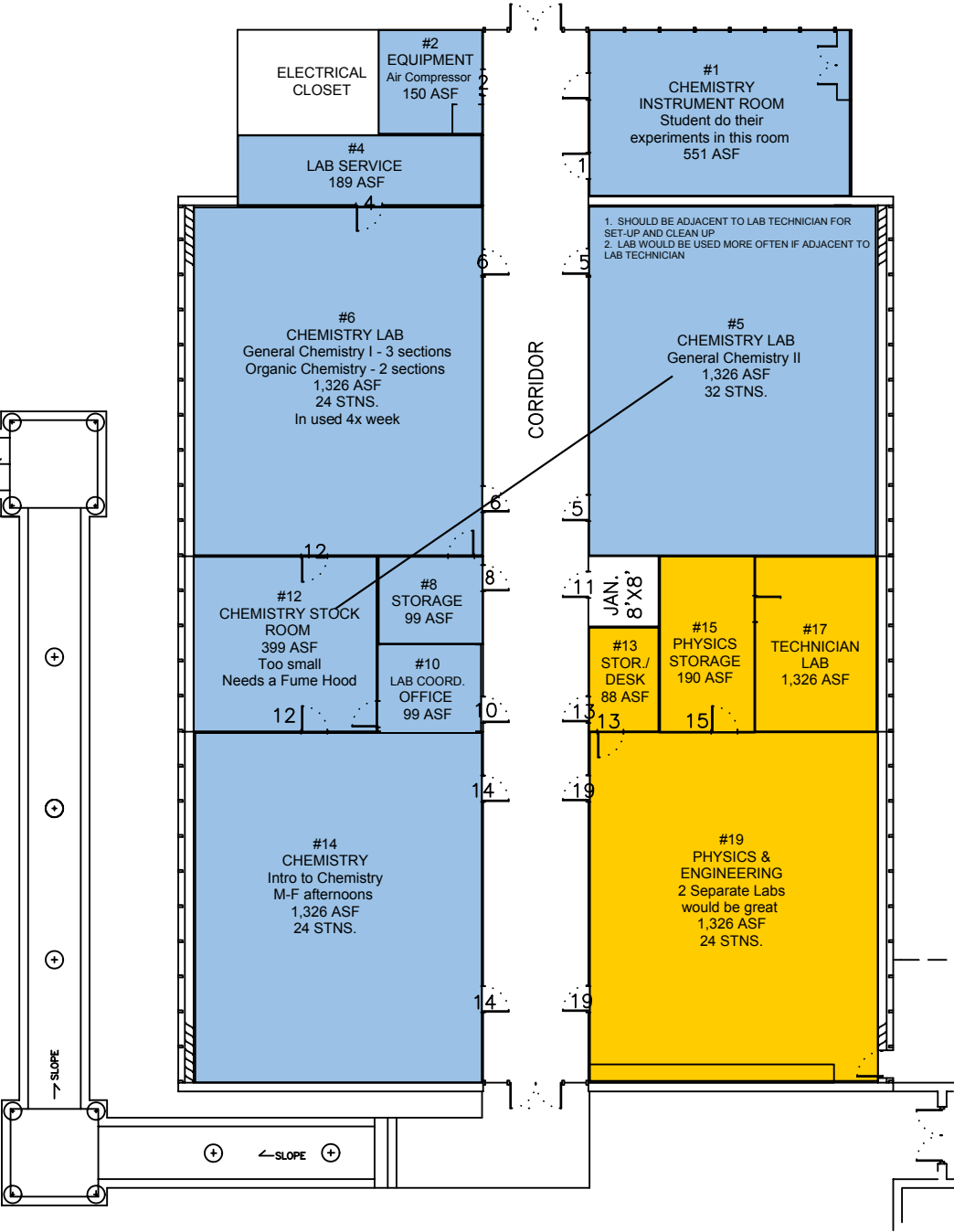
PHYSICAL SCIENCE BUILDING

FLOOR PLAN

SHEET 1 OF 2

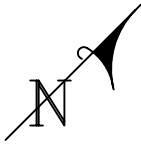
LEGEND
COLOR CODED FLOOR PLAN BY DEPARTMENT

- SHARED / GENERAL ASSIGNMENT
- NURSING / CNA
- MEDICAL ASSISTING
- EMERGENCY MEDICAL TECHNICIAN (EMT)
- BIOLOGY, GENERAL
- MICROBIOLOGY
- ANATOMY & PHYSIOLOGY
- BIOTECH & BIOMEDICAL TECHNOLOGY
- PHYSICS & ENGINEERING
- CHEMISTRY, GENERAL
- CENTER FOR EXCELENCE IN SCIENCE



BLDG. NAME
ABBREVIATED
PS
BLDG. CODE
O21

0 5 10 20 40
SCALE: 1" = 20'



FLOORPLN/Cccps1f
ALL DIMENSIONS ARE APPROXIMATE
10/24/03

FOR CONTINUATION SEE
PHYSICAL SCIENCE
SHEET 2 OF 2, PG. 26

CONTRA COSTA COLLEGE - CCCC

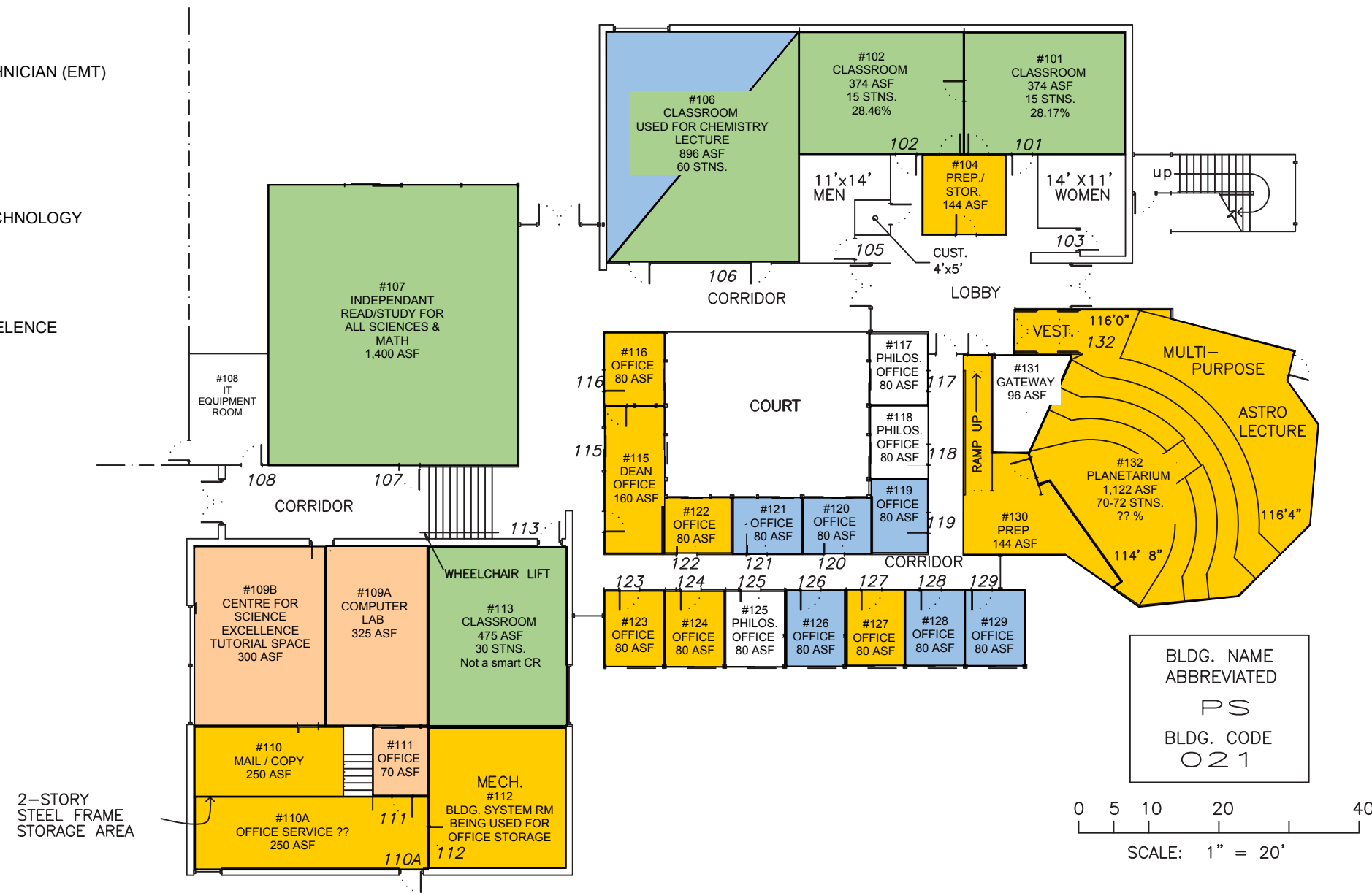
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PHYSICAL SCIENCE BUILDING FLOOR PLAN

SHEET 2 OF 2

LEGEND
COLOR CODED FLOOR PLAN BY DEPARTMENT

- SHARED / GENERAL ASSIGNMENT
- NURSING / CNA
- MEDICAL ASSISTING
- EMERGENCY MEDICAL TECHNICIAN (EMT)
- BIOLOGY, GENERAL
- MICROBIOLOGY
- ANATOMY & PHYSIOLOGY
- BIOTECH & BIOMEDICAL TECHNOLOGY
- PHYSICS & ENGINEERING
- CHEMISTRY, GENERAL
- CENTER FOR SCIENCE EXCELLENCE



FLOORPLN/Cccps2f
 ALL DIMENSIONS ARE APPROXIMATE
 10/24/03

CONTRA COSTA COLLEGE - CCCC

18.2

3 | Room Criteria

Biological Sciences Room Data Sheets

ROOM NAME: GENERAL BIOLOGY LAB
DEPARTMENT: General Biology
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations ; 1 Instructor station

USE	Activities:	Instruction – General & Major Biology
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	General Biology Prep Lab, General Biology Technician Office, Model Storage

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Built-in student work benches: <ul style="list-style-type: none"> ▪ (3) Long built-in lab benches ▪ (5) Seated Stations on either side with knee space ▪ Each station to have: <ul style="list-style-type: none"> ▪ 2-power outlets ▪ Lockable equipment cabinets ▪ Door for Microscope storage ▪ NO Drawers ▪ Standing height demonstration station at end of each bench with power and lockable storage below ▪ Chemical resistant countertop ▪ Built-in Instructor Demonstration Bench: <ul style="list-style-type: none"> ▪ Sink with hot, cold & DI water ▪ 4-power outlets ▪ Lockable Lower & Upper Cabinets with counter space at perimeter wall(s) as needed for storage, equipment and (2) Equipment sinks
	Accessories:	Sliding Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data

Security:	Lockable – card key access
Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(2) Equipment Sinks & (1) Sink at Demo bench, each with hot, cold and DI water
		Emergency Eye & Shower wash stations as required
	Electrical	Electrical at perimeter as needed for equipment
		(4) power outlets at demonstration bench (2) power outlets per student station (4) power outlets per student demo stations
Other:		

EQUIPMENT & FURNISHINGS	30 Student stools; 1 Instructor stool Trash & recycling receptacles
-------------------------	--

REMARKS This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.

See Room Diagram for room layout.

ROOM NAME: GENERAL BIOLOGY LAB PREP
DEPARTMENT: Biology
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 250 ASF
CAPACITY: N/A

USE	Activities:	Lab Prep for General & Major Biology classes
	Access:	Staff, faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	General Biology Class Lab, General Biology Technician Office

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Prep Work Bench in middle of room: <ul style="list-style-type: none"> ▪ Standing height ▪ Sink – Hot & Cold water ▪ Power outlets at center of bench ▪ Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	None
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Hoods – Confirm if needed
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(1) Sink with hot, cold and DI water Dishwasher Emergency Eye & Shower wash stations as required
	Electrical:	Electrical at perimeter as needed for equipment and in center of prep bench as needed

Other:

EQUIPMENT & FURNISHINGS	Refrigerator, Dishwasher 1 Instructor stool Trash & recycling receptacles
Other:	See remarks below

REMARKS	This department is equipment heavy and has many special items. Exact equipment and special items to be relocated and furnished new is to be determined.
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ROOM NAME: MODEL STORAGE
DEPARTMENT: General Biology
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 110 ASF
CAPACITY: N/A

USE	Activities:	Model Storage – prefer shape long and narrow with storage on either side for easier access to models
	Access:	Staff, faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	General Biology Class Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Not required
	Casework:	Lockable full height built-in storage on one side and lower & upper cabinets on opposite wall. Provide storage and counter-space as needed
	Accessories:	White board
	Hardware:	Lockable – card key access
Other:	Vision panel in door; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	<i>All models to be stored to be confirmed during design</i>
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REMARKS

ROOM NAME: GENERAL GLASS STORAGE
DEPARTMENT: Biological Sciences – Shared between all
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 110 ASF
CAPACITY: N/A

USE	Activities:	Common Glassware & Chemical Storage
	Access:	Staff, faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	General Biology Lab Cood. Office

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	N/A
	Natural Light:	N/A
	Casework:	<ul style="list-style-type: none"> • Lockable Cabinets along two long walls • One side for General Glassware/Cylinders etc. • Other side for Common Chemical Stocks
	Accessories:	None
	Hardware:	Lockable – card key access
	Other:	Vision panel in door?

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	Exact Items to be stored to be determined during design.
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REMARKS

ROOM NAME: BIOTECH LAB
DEPARTMENT: Biotechnology
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations ; 1 Instructor station

USE	Activities:	Instruction – Biotechnology
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per Semester Schedule
	Adjacencies:	Clean Room, Media Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space ▪ Secure storage for Microscopes
	Accessories:	Sliding White Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power Data ports on three walls as needed
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (2) Fume Hoods
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(2) Sinks – Hot & cold water with separate tap for Filtered DI water used for experiments (15) Wet stations – 2 students per sink Emergency Eye & Shower wash stations as required
		Electrical at perimeter as needed for equipment
	Other:	

EQUIPMENT &
FURNISHINGS

Refrigerator with sliding glass doors to store reagents and enzymes
(30) Student stools; (1) Instructor stool
(15) dry stations for computers – 2 students per computer
Microscope Storage
Moveable work benches/student lab stations with storage – TBD
Trash & recycling receptacles`
Other: See remarks below

REMARKS

This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined by design team.

Classes transition between lecture, group discussion and lab work often.

ROOM NAME: CELL CULTURE CLEAN ROOM
DEPARTMENT: Biotechnology
ROOM TYPE: 220 Lab
PROPOSED ASF: 300 ASF
CAPACITY: 5 Stations for 10 Students

USE	Activities:	Cell culture clean room – BSL II Lab
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Biotech Class Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile – Special Clean?
	Floor Finish:	Resilient Flooring – Special Flooring – Anti-static?
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Not required
	Casework:	Casework at Fume Hoods Lower cabinets with countertop as needed Extra deep counter required for Incubator equipment
	Accessories:	White board?
	Hardware:	Lockable – card key access
	Other:	UV Protective Vision panel in door

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	Campus Clock

MECHANICAL,	Ventilation:	Separate air/ventilation system from rest of building; Heating and cooling; (4) BioSafety Cabinets (BSC) with electrical, 6'-8' in length
ELECTRICAL	Artificial Lighting:	Overhead lighting Ceiling UV sterilization
& PLUMBING	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	CO2 access for incubators
	Electrical:	Outlets at walls at needed, outlets within BioSafety cabinets Emergency Eye & Shower wash stations as required

EQUIPMENT & Existing Hoods:
a) "Lacconco" Purifier Cabinet BioSafety Cabinet, see appendix photos
b) "SterilGard Hood" the Baker Company, see appendix photos

FURNISHINGS Central moveable table
(2) chairs per cabinet, total of (8) chairs, with rollers and adjustable height

REMARKS This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.

ROOM NAME: MICROBIOLOGY LAB
DEPARTMENT: Microbiology
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations ; 1 Instructor station

USE	Activities:	Instruction – Microbiology – BSL-2
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per Semester Schedule
	Adjacencies:	Microbiology Prep Lab, Microbiology Storage

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	No Windows – See Faculty handout in appendix describing BSL-2 lab conditions
	Casework:	<ul style="list-style-type: none"> ▪ Built-in student work benches (like existing bench set-up): <ul style="list-style-type: none"> ▪ (3) Long built-in lab benches ▪ (5) Stations on either side ▪ Standing height ▪ Knee Space ▪ Chemical resistant countertop ▪ Sinks in center of bench with cold regular water & DI water – (1) sink per (4) stations ▪ Hand washing sinks at end of each bench ▪ Each station to have: <ul style="list-style-type: none"> ▪ Gas outlet ▪ 2-power outlets ▪ (3) deep lockable equipment drawers ▪ (1) Microscope cabinet ▪ Instructor Demonstration Bench: <ul style="list-style-type: none"> ▪ (1) Sink with hot, cold and DI water ▪ Gas/Vacuum outlet ▪ Fume Hood Cabinetry with storage below and counter space on the sides and (2) power outlets in-between to plug equipment into outside of the hood ▪ (30) Cubbies for students to place belongings (can't take backpacks, phones etc. to benches) ▪ Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	Sliding Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (3) Bio Safety Cabinets/Fume Hoods Large enough for 2 students per hood Equipped with Vacuum, electrical outlets
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required NOTE: Space contains BSL-2 Microorganisms
	Plumbing:	(3) Handwashing sinks, (15) student sinks & (1) Demonstration sink with cold & DI water Emergency Eye & Shower wash stations as required
		(30) Gas outlets at student stations, (1) Gas outlet at demo bench
		Electrical at perimeter as needed for equipment (60) student duplex power outlets, (2) duplex outlets at demonstration bench
	Other:	

EQUIPMENT & FURNISHINGS	30 Student stools; 1 Instructor stool Trash & recycling receptacles Racks for equipment along walls Other: See remarks below
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REMARKS This department is equipment heavy. Exact equipment to be relocated, removed and new to be determined.

See Room Diagram for Class Lab layout.

ROOM NAME: MEDIA LAB
DEPARTMENT: Biotech & Microbiology
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 350 ASF
CAPACITY: N/A

USE	Activities:	Prep lab for Biotech & Microbiology Clean Room – Biohazard waste is sterilized here
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Microbiology Prep Lab, Microbiology Storage

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	White boards?
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Vacuum required
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None - Confirm
	Electrical:	Electrical at perimeter as needed for equipment
	Other:	

EQUIPMENT & FURNISHINGS	<p>Autoclave Machine – locate adjacent to exterior wall because it is very loud – requires 3' clearance on 3 sides of the equipment for maintenance</p> <p>Trash & recycling receptacles</p> <p>Any hazardous waste is placed in the Chemistry Waste Storage Building</p> <p>This department is equipment heavy and has many special items. Exact equipment and special items to be relocated and furnished new is to be determined.</p>
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ROOM NAME: MICROBIOLOGY PREP LAB
DEPARTMENT: Microbiology
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 450 ASF
CAPACITY: N/A

USE	Activities:	Microbiology Prep lab - Inoculation room
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Media Lab, Microbiology Class Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Not required – see Faculty handout in appendix describing BSL-2 labs
	Casework:	Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	White boards?
	Hardware:	Lockable – card key access
Other:	Vision panel in door; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (1) Bio-Safety Fume Hood Dryer Ventilation
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required NOTE: Space contains BSL-2 Microorganisms
	Plumbing:	(1) Sinks with hot & cold water and Ultra-Pure water Dishwasher hook-ups Emergency Eye & Shower wash stations as required Outlets - Gas? Electrical?

EQUIPMENT & FURNISHINGS REMARKS	Dishwasher, Front loading Washer & Dryer Trash & recycling receptacles This department is equipment heavy and has many special items. Exact equipment and special items to be relocated and furnished new is to be determined.
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ROOM NAME: DISPOSABLE SUPPLY STORAGE
DEPARTMENT: Microbiology
ROOM TYPE: 215 Lab Service
PROPOSED ASF: 120 ASF
CAPACITY: N/A

USE	Activities:	Storage of disposable medical plastics
	Access:	Staff, Faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	Microbiology Class Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Not required
	Casework:	Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	None
	Hardware:	Lockable – card key access
Other:	Vision panel in door	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Electrical:	As required by code
Other:		

EQUIPMENT & FURNISHINGS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.
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REMARKS	<i>Please provide any additional information....</i>
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ROOM NAME: ANATOMY LAB
DEPARTMENT: Anatomy & Physiology
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations ; 1 Instructor station

USE	Activities:	Instruction – Anatomy & Physiology
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Cadaver Lab and Anatomy/Physiology Prep Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Student Stations can be either built-in or moveable; shape/size TBD – each station to be equipped with: <ul style="list-style-type: none"> ▪ (2) power outlets ▪ Standing height ▪ Secure microscope storage ▪ Built-in Instructor Demonstration Bench: <ul style="list-style-type: none"> ▪ 4-power outlets ▪ Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space, (4) equipment sinks at perimeter walls
Perimeter walls	Accessories:	Sliding Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(4) Equipment sinks at perimeter with hot & cold and DI water

	Emergency Eye & Shower wash stations as required
	Flush Electrical & Data Floor outlets for student and instructor moveable work benches to plug into if not built-in
	Electrical at perimeter as needed for equipment
	Other:

EQUIPMENT & FURNISHINGS

Student stations to be either moveable or built-in - TBD
 30 Student stools; 1 Instructor stool
 Trash & recycling receptacles

REMARKS

This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.

See Room Diagram from Class Lab Layout

ROOM NAME: **PHYSIOLOGY LAB**
DEPARTMENT: **Anatomy & Physiology**
ROOM TYPE: **210 Lab**
PROPOSED ASF: **1,560 ASF**
CAPACITY: **30 Student Stations ; 1 Instructor station**

USE	Activities:	Instruction – Physiology & Anatomy
	Access:	Students, Faculty, Staff
	Frequency/Hours	?
	Adjacencies:	Physiology Equipment Room

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	Sliding Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	Sinks?
		DI water?
		Emergency Eye & Shower wash stations as required
		Outlets - Gas?
	Flush Electrical & Data Floor outlets for student and instructor moveable work benches to plug into	
	Electrical at perimeter as needed for equipment	
Other:		

EQUIPMENT & FURNISHINGS	Moveable student and instructor stations with power that can plug into the floor 30 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined. See Room Diagram from Class Lab Layout
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ROOM NAME: **CADAVER LAB**
DEPARTMENT: **Anatomy**
ROOM TYPE: **210 Lab**
PROPOSED ASF: **660 ASF**
CAPACITY: **2 Cadaver Stations; 15 Students**

USE	Activities:	Instruction – Anatomy
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Anatomy Class Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Full height Secure Cabinets with Glass Doors ▪ Tissue Prep Cupboard ▪ Countertop with sink and lockable lower Cabinets below and space for small freezer ▪ Bone Storage lockable lower & upper cabinets with countertop for layout space
	Accessories:	White boards Wall space for Posters Lab Coat Hooks
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (3) Cadaver Ventilation Stations (Depending on system used) Code compliant ventilation and air flow
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(1) Sink with hot & cold and DI water (1) Hand Sink
		Emergency Eye & Shower wash stations as required

Electrical at perimeter as needed for equipment

Other:

EQUIPMENT & FURNISHINGS	(3) Gurneys, (2) Cadavers; Small under counter freezer Trash & recycling receptacles
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REMARKS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined. See Room Diagram for Class Lab Layout
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ROOM NAME: ANATOMY/PHYSIOLOGY PREP LAB
DEPARTMENT: Anatomy & Physiology
ROOM TYPE: 210 Lab
PROPOSED ASF: 575 ASF
CAPACITY: N/A

USE	Activities:	Prep for Anatomy & Physiology Lab Classes
	Access:	Staff, Faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	Between Anatomy and Physiology Class Labs; and adjacent to Technician Office

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	Center work bench Lockable Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Hoods?
	Artificial Lighting:	Overhead lighting, task lighting as needed
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(1) Equipment Sink with hot, cold and DI water DI water? Emergency Eye & Shower wash stations as required
		Electrical at perimeter as needed for equipment – many outlets required – ensure appropriate amount is provided
	Other:	

EQUIPMENT &
FURNISHINGS

Trash & recycling receptacles

REMARKS

This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.

ROOM NAME: **PHYSIOLOGY EQUIPMENT STORAGE**
DEPARTMENT: **Biology**
ROOM TYPE: **215 Lab Service**
PROPOSED ASF: **ASF**
CAPACITY: **N/A**

USE	Activities:	Student Activities (EKG practice) and Equipment storage
	Access:	Staff, Faculty, Students
	Frequency/Hours	Per semester schedule
	Adjacencies:	Physiology Class Labs

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	Lockable Lower & Upper Cabinets with counter space at perimeter wall(s) as needed for electrical recording equipment
	Accessories:	
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Electrical:	Power for 2-EKG Beds

EQUIPMENT & FURNISHINGS	Free wall space for (2) 4'-6" long x 30" wide EKG beds
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REMARKS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.
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ROOM NAME: LAB TECHNICIAN OFFICE
DEPARTMENT: General Biology
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station

USE	Activities:	General office work
	Access:	Staff, Faculty
	Frequency/Hours:	Per semester schedule
	Adjacencies:	General Biology Prep Lab; General Glass Storage; General Biology Class Lab; Hallway

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet or Resilient flooring depending on location
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	As needed for equipment
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	<i>*Provide Dimensions</i>
	(1) Telephone		

REMARKS This department is equipment heavy and has many special items. Exact equipment and special items to be relocated and furnished new is to be determined.

ROOM NAME: LAB TECHNICIAN OFFICE
DEPARTMENT: Biotech & Microbiology
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station

USE	Activities:	General office work
	Access:	Staff, Faculty
	Frequency/Hours:	Per semester schedule
	Adjacencies:	Media Prep Lab; Hallway

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet or Resilient flooring depending on location
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	As needed for equipment storage
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	*Provide Dimensions
	(1) Telephone		

REMARKS This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.

ROOM NAME: LAB TECHNICIAN OFFICE
DEPARTMENT: Anatomy/Physiology
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station

USE	Activities:	General office work
	Access:	Staff, Faculty
	Frequency/Hours:	Per semester schedule
	Adjacencies:	Anatomy/Physiology Prep Lab; Hallway

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet or Resilient flooring depending on location
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	As needed for equipment
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	*Provide Dimensions
	(1) Telephone		

REMARKS *Please provide any additional information....*

ROOM NAME: FACULTY OFFICE X 5
DEPARTMENT: Biological Sciences
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station

USE	Activities:	General office work
	Access:	Staff, Faculty, Students
	Frequency/Hours:	
	Adjacencies:	Class Labs

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet or Resilient flooring depending on location
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	None
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	*Provide Dimensions
	(1) Telephone		

REMARKS *Please provide any additional information....*

Chemistry Room Data Sheets

ROOM NAME: INTRO TO CHEMISTRY LAB
DEPARTMENT: Chemistry
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations

USE	Activities:	Instruction – Introduction to Chemistry
	Access:	Students, Faculty, Staff
	Frequency/Hours	M-F afternoons
	Adjacencies:	Chemistry Stock Room

CHARACTERISTICS	Ceiling Height:	10'-0" min.
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Flooring that is Chemical Resistant
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Built-in student work benches: <ul style="list-style-type: none"> ▪ (3) Long built-in lab benches ▪ (5) Stations on either side ▪ Standing height ▪ Knee Space – to store student belongings during class and be able to sit at the bench by tucking knees under counter for lab lecture, quizzes etc. ▪ Chemical resistant countertop ▪ Sink at each end of benches for total of (6) ▪ 2 Faucets each • 1 - DI Water • 1 - Regular Cold Water ○ Each station to have: <ul style="list-style-type: none"> • Vacuum & Gas outlet • 2-power outlets • Lockable student equipment drawers (number per station TBD) ○ (1) Lockable student equipment drawer for each student per semester – 120 Lockers Requested – verify total needed ▪ Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space ▪ Lower Cabinetry at Fume Hoods
	Accessories:	Sliding or Up-down Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (4) Fume Hoods on two sides for a total of (8)
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(6) Sinks with DI water & Regular Cold water– (1) at each end of student bench Emergency Eye & Shower wash stations as required
		(30) Outlets with Gas & Vacuum – one at each station at lab benches
		(2) Power outlets per station at lab benches
		Electrical at perimeter as needed for equipment
Other:		

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 30 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS	See Room Diagram for Class Lab Layout
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ROOM NAME: GENERAL CHEMISTRY LAB
DEPARTMENT: Chemistry
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations

USE	Activities:	Instruction – General Chemistry II
	Access:	Students, Faculty, Staff
	Frequency/Hours	M-F
	Adjacencies:	Chemistry Stock Room

CHARACTERISTICS	Ceiling Height:	10'-0" Min.
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Flooring that is Chemical Resistant
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> • Built-in student work benches: <ul style="list-style-type: none"> ○ (3) Long built-in lab benches ○ (5) Stations on either side ○ Standing height ○ Knee Space – to store student belongings during class and be able to sit at the bench by tucking knees under counter for lab lecture, quizzes etc. ○ Chemical resistant countertop ○ Sink at each end of benches for total of (6) <ul style="list-style-type: none"> ▪ 2 Faucets each <ul style="list-style-type: none"> • 1 - DI Water • 1 - Regular Cold Water ○ Each station to have: <ul style="list-style-type: none"> ▪ Vacuum & Gas outlet ▪ 2-power outlets ▪ Lockable student equipment drawers (number per station TBD) ○ (1) Lockable student equipment drawer for each student per semester – 120 Lockers Requested – verify total needed • Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space • Cabinetry at Fume Hoods
	Accessories:	Sliding or Up-down Chalk Boards – maximize board space
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (4) Fume Hoods on two sides for a total of (8)
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(6) Sinks with DI water – (1) at each end of student bench
		Emergency Eye & Shower wash stations as required
		(30) Outlets with Gas & Vacuum – one at each station at lab benches
		(2) Power outlets per station at lab benches
		Electrical at perimeter as needed for equipment
Other:		

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 30 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS	See Room Diagram for Class Lab Layout
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ROOM NAME: ORGANIC CHEMISTRY LAB
DEPARTMENT: Chemistry
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,560 ASF
CAPACITY: 30 Student Stations

USE	Activities:	Instruction – General Chemistry I & Organic Chemistry
	Access:	Students, Faculty, Staff
	Frequency/Hours	M-F
	Adjacencies:	Chemistry Stock Room, Instrument Room (could be across the hall)

CHARACTERISTICS	Ceiling Height:	10'-0" Min.
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Flooring that is Chemical Resistant
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ Built-in student work benches: <ul style="list-style-type: none"> ▪ (3) Long built-in lab benches ▪ (5) Stations on either side ▪ Standing height ▪ Knee Space – to store student belongings during class and be able to sit at the bench by tucking knees under counter for lab lecture, quizzes etc. ▪ Chemical resistant countertop ▪ Sink at each end of benches for total of (6) ▪ 2 Faucets each ▪ 1 - DI Water ▪ 1 - Regular Cold Water ▪ Smaller sinks with regular water in middle of lab benches, one per every (2) stations for total of (15) ▪ Each station to have: <ul style="list-style-type: none"> ▪ Vacuum & Gas outlet ▪ 2-power outlets ▪ Lockable student equipment drawers (number per station TBD) ▪ Lockable student equipment drawer for each student per semester – 60 Organic Chemistry Lockers & 40 standard Chemistry Lockers Requested – verify total needed ▪ Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space ▪ Cabinetry at Fume Hoods
	Accessories:	Sliding Chalk Boards – maximize board space
	Hardware:	Lockable – card key access

	Other:	Vision panel in door; Sun shades at exterior windows
TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Card key access
	Other:	Intrusion Alarm – with possibility of zoning
MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (3-4) Fume Hoods on two sides for a total of (6-8) Gas line and (4) power outlets per hood
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(6) Sinks with DI water – (1) at each end of lab benches
		(15) Small sinks – (5) in middle of each lab bench
		Emergency Eye & Shower wash stations as required
		(30) Outlets with Gas & Vacuum – one at each station at lab benches
		(2) Power outlets per station at lab benches
		Electrical at perimeter as needed for equipment
	Other:	Ice Machine
EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 30 Student stools; 1 Instructor stool	
REMARKS	See Room Diagram for Class Lab Layout	

ROOM NAME: INSTRUMENT LAB
DEPARTMENT: Chemistry
ROOM TYPE: 220 Lab
PROPOSED ASF: 550 ASF
CAPACITY: 10 Stations

USE	Activities:	Students conduct/run experiments in this lab
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Needs to be separate but close to the Chemistry class labs

CHARACTERISTICS	Ceiling Height:	10'-0"
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Not required
	Casework:	<ul style="list-style-type: none"> • Built-in student work benches – to be confirmed, could be moveable furniture • Cabinetry for fume hood and sink • Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	Chalk Boards, White boards and/or Bulletin Board
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	TBD
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (1) Fume Hood
	Artificial Lighting:	Overhead dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(1) Sink with DI water
		Emergency Eye & Shower wash stations as required
		Gas & Vacuum outlet
	Other:	Electrical at perimeter as needed for equipment

EQUIPMENT &
FURNISHINGS

See Equipment list provided by Faculty in the Appendix
10 Student stools; 1 Instructor stool
Trash & recycling receptacles

REMARKS

ROOM NAME: STOCK ROOM
DEPARTMENT: Chemistry
ROOM TYPE: 215 Lab
PROPOSED ASF: 500 ASF
CAPACITY: 1 Technician station, 1-2 Students

USE	Activities:	Preparation for Class Labs, Equipment Set-up, Chemical Storage, Glass Equipment Storage
	Access:	Staff, Student Workers, Faculty
	Frequency/Hours	M-F
	Adjacencies:	Needs to be adjacent to all 3 chemistry class labs and equipment storage

CHARACTERISTICS	Ceiling Height:	10'-0"
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Not required
	Natural Light:	Preferred
	Casework:	Lower & Upper Cabinets as needed for storage and counter-space Special storage cabinetry with glass doors for Chemical Storage and Glass Equipment storage Cubbies for Student workers to store their belongings – up to 4 workers at a time
	Accessories:	Bulletin board – space to post safety sheets
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (1) Fume Hood with gas and electrical outlets
	Artificial Lighting:	Overhead lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(1) Big, deep equipment sink with hot, cold, & DI water; Dishwasher hook-ups Water-line for ice machine Emergency Eye & Shower wash stations as required

Electrical:	Outlets with Gas, DI water, & Vacuum – at technician station
	Electrical at perimeter as needed for equipment

Other:

EQUIPMENT &
FURNISHINGS

Dishwasher, Ice machine
2 stools
Trash & recycling receptacles
Hazardous material is currently stored in the Chemical Storage building adjacent to PS Bldg.

REMARKS

See Equipment list provided by Faculty in the Appendix

ROOM NAME: EQUIPMENT STORAGE
DEPARTMENT: Chemistry
ROOM TYPE: 215 Lab
PROPOSED ASF: 180 ASF
CAPACITY: 1 Technician station

USE	Activities:	Houses Machines & Chemical Refrigerators
	Access:	Staff, Faculty
	Frequency/Hours	M-F
	Adjacencies:	Chemistry Stock Room, Class Labs

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Resilient Flooring
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space
	Accessories:	
	Hardware:	Lockable – card key access
	Other:	Vision panel in door; Sun shades at exterior windows

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Lockable – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead Fluorescent lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Electrical	Electrical at perimeter as needed for equipment
	Other:	Main Fume Hood Switch – <i>shut off of all fume hoods in Class Labs</i>

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 1 stool, Trash & recycling receptacles
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REMARKS

ROOM NAME: LAB TECHNICIAN OFFICE
DEPARTMENT: Chemistry
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station

USE	Activities:	General office work, full-time faculty private office
	Access:	Staff, Faculty
	Frequency/Hours:	
	Adjacencies:	Adjacent to other department faculty offices

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet or Resilient flooring depending on location
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	None
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Cardkey access?
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	<i>*Provide Dimensions</i>
	(1) Telephone		

REMARKS

ROOM NAME: FACULTY OFFICE x 3
DEPARTMENT: Chemistry
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Faculty station; 1 Guest chair

USE	Activities:	General office work, full-time faculty private office
	Access:	Faculty, Staff, Students
	Frequency/Hours:	M-F
	Adjacencies:	Other department faculty offices

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	None
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Cardkey access?
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	<i>*Provide Dimensions</i>
	(1) Telephone		

REMARKS

ROOM NAME: CHEMICAL STORAGE
DEPARTMENT: Chemistry/Biology
ROOM TYPE: 730 Storage
PROPOSED ASF: Approx. 500 ASF
CAPACITY: N/A

USE	Activities:	Storage of Hazardous materials
	Access:	Staff, Faculty
	Frequency/Hours	M-F
	Adjacencies:	Close to Chemistry Department

CHARACTERISTICS	Ceiling Height:	TBD
	Ceiling Treatment:	None
	Floor Finish:	Concrete
	Wall Finish:	Concrete
	Acoustic Treatment:	None
	Natural Light:	None
	Casework:	None
	Accessories:	None
	Hardware:	Lockable – card key access
Other:		

TECHNOLOGY	Audio / Visual:	None
	Network:	Yes
	Communications:	Phone / Data
	Security:	Lockable – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Special Code Required Ventilation
	Artificial Lighting:	TBD
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	Emergency Eye & Shower wash stations as required
	Other:	

EQUIPMENT FURNISHINGS	None
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REMARKS	Design Architects to review current code and design new space to meet the code.
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Physics/Engineering Room Data Sheets

ROOM NAME: PHYSICS LAB
DEPARTMENT: Physics
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,325 ASF
CAPACITY: 24 - 30 Student stations: TBD

USE	Activities:	Instruction, Experiments
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Large double doors opening to Engineering Lab and makers lab, close to Lab storage & Tech/Prep Lab

CHARACTERISTICS	Ceiling Height:	10'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Concrete floor, similar to existing lab floor
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ 6 Built-in student work benches with: <ul style="list-style-type: none"> ▪ Approx. 5' x 9' (verify dims.) ▪ 4-5 stations per bench ▪ Standing height ▪ Knee Space ▪ (2) Shared computer at end of bench ▪ Secure storage below on each side for equipment such as switches, power resistors & lamps ▪ Switching/Electrical/Network ▪ Sink in middle ▪ Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space ▪ Full height secure storage along one wall similar to existing
	Accessories:	White boards & Bulletin Boards
	Hardware:	Card key access
	Other:	Vision panel in door
		Black-out shades at windows – needed when doing laser experiments

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Secure – card key access
	Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(6) Sinks with (4) faucets each of cold water located in center of student bench
		(1) Large sink at perimeter of room with hot & cold water
Other:	(4) stations of Power/Data at each bench – <i>please provide counts and any other special electrical</i>	
	Electrical at perimeter as needed for equipment	

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 30 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS	See Room Diagram for Class Lab Layout
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ROOM NAME: ENGINEERING/PHYSICS LAB
DEPARTMENT: Physics
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,325 ASF
CAPACITY: 24 - 30 Student stations; 1 Instructor station

USE	Activities:	Instruction, Experiments
	Access:	Students, Faculty, Staff
	Frequency/Hours	Per semester schedule
	Adjacencies:	Large double doors opening onto Physics Lab, close to Lab storage & Tech/Prep Lab

CHARACTERISTICS	Ceiling Height:	10'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Concrete floor, similar to existing lab floor
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	<ul style="list-style-type: none"> ▪ 6 Built-in student work benches with: <ul style="list-style-type: none"> ▪ Approx. 5' x 9' (verify dims.) ▪ 4-5 stations per bench ▪ Standing height ▪ Knee Space ▪ (2) Shared computer at end of bench ▪ Secure storage below on each side for equipment such as switches, power resistors & lamps <ul style="list-style-type: none"> ▪ Switching/Electrical/Network ▪ Lower & Upper Cabinets at perimeter wall(s) as needed for storage and counter-space ▪ Full height secure storage along one wall similar to existing
	Accessories:	White boards, Bulletin Boards
	Hardware:	Card key access
	Other:	Vision panel in door
	Black-out shades at windows – needed when doing laser experiments	

TECHNOLOGY	Audio / Visual:	Ceiling-mounted video/data projector; motorized projection screen; ceiling speakers; assisted listening system integration
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Secure – card key access
	Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; (1) Fume hood at perimeter of lab
	Artificial Lighting:	Continuous or stepped dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	(6) Sinks with (4) faucets each of cold water located in center of student bench (1) Large sink at perimeter of room with hot & cold water
	Other:	(4) stations of Power/Data at each bench – <i>please provide counts and any other special electrical</i> Electrical at perimeter as needed for equipment

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix 30 Laptops with charging station – will store in equipment room 30 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS	See Room Diagram for Class Lab Layout
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ROOM NAME: MAKERS LAB
DEPARTMENT: Physics
ROOM TYPE: 210 Lab
PROPOSED ASF: 450 ASF
CAPACITY: 10 Stations

USE	Activities:	Student interaction, experimentation
	Access:	Students, Faculty, Staff
	Frequency/Hours	
	Adjacencies:	Tech/Prep Lab, Lab storage, connected to Physics & Engineering class labs

CHARACTERISTICS	Ceiling Height:	10'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Concrete floor, similar to existing lab floor
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	Student stations at perimeter of room (2-sides)
	Accessories:	White boards & Bulletin Boards
	Hardware:	Card key access
	Other:	Vision panel in door Black-out shades at windows – needed when doing laser experiments

TECHNOLOGY	Audio / Visual:	TBD
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Secure – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead dimmable lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Other:	Electrical as needed for equipment

EQUIPMENT & FURNISHINGS	<i>See attached excel equipment schedule file to list all equipment, please create a new tab for each room, thank you</i> 10 Student stools; 1 Instructor stool Trash & recycling receptacles
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REMARKS

ROOM NAME: TECH/PREP LAB
DEPARTMENT: Physics/Engineering
ROOM TYPE: 210 Lab
PROPOSED ASF: 275 ASF
CAPACITY: 2 Stations

USE	Activities:	Lab prep
	Access:	Staff, Faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	Lab storage, close to Physics & Engineering class labs

CHARACTERISTICS	Ceiling Height:	10'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Concrete floor, similar to existing lab floor
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	Preferred
	Casework:	TBD
	Accessories:	White board/bulletin board Wall board for hanging equipment
	Hardware:	Card key access
	Other:	Vision panel in door

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Secure – card key access

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Overhead lighting; Task lighting at desks
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Other:	As needed for equipment set up Campus clock

EQUIPMENT* & FURNISHINGS	1 chair	1 desk	1 technician computer
	2 monitors	1 phone	1 equipment control computer
	1 Stool	Trash & recycling receptacles	2 File cabinets

REMARKS See Equipment list provided by Faculty in the Appendix

ROOM NAME: EQUIPMENT STORAGE
DEPARTMENT: Physics
ROOM TYPE: 215 Lab
PROPOSED ASF: 190 ASF
CAPACITY: N/A

USE	Activities:	Equipment Storage
	Access:	Lab Technician & Faculty
	Frequency/Hours	Per semester schedule
	Adjacencies:	Tech/Prep Lab, Physics & Engineering Lab

CHARACTERISTICS	Ceiling Height:	9'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Concrete floor, similar to existing lab floor
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Not required
	Natural Light:	Not required
	Casework:	Open shelving to store equipment
	Accessories:	None
	Hardware:	Secure
	Other:	Vision panel in door

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	None
	Security:	Secure – card key access
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Fluorescent lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	See Equipment list provided by Faculty in the Appendix Rolling carts
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REMARKS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined.
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ROOM NAME: FACULTY OFFICE x 4
DEPARTMENT: Physics/Engineering
ROOM TYPE: 310 OFFICE
PROPOSED ASF: 90 ASF
CAPACITY: 1 Staff station; 1 Guest chair

USE	Activities:	General office work, full-time faculty private office
	Access:	Faculty, Staff, Students
	Frequency/Hours:	Per semester schedule
	Adjacencies:	Other department faculty offices

CHARACTERISTICS	Ceiling Height:	8'-0" minimum
	Ceiling Treatment:	Acoustical ceiling tile
	Floor Finish:	Carpet
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Acoustic Privacy
	Natural Light:	Preferred
	Casework:	None
	Accessories:	White board and/or Bulletin board
	Hardware:	Lockable
Other:	Sidelight; Sun shades at exterior windows	

TECHNOLOGY	Audio / Visual:	None
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Cardkey access?
	Other:	

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling; Natural ventilation if possible
	Artificial Lighting:	Overhead lighting; Task lighting at desk
	Fire Protection:	Sprinklers, Smoke detectors
	Plumbing:	None
	Other:	

EQUIPMENT & FURNISHINGS	(1) Computer	(1) Chair	(1) Bookcase*
	(2) Monitors	(1) Guest Chair	1 or 2 File Cabinets*
	(1) Desk	(1) Laptop	<i>*Provide Dimensions</i>
	(1) Telephone		

REMARKS

ROOM NAME: PLANETARIUM & PREP SPACE
DEPARTMENT: Physics
ROOM TYPE: 210 Lab
PROPOSED ASF: 1,500 ASF
CAPACITY: 72 Student stations; 1 Demonstration station

USE	Activities:	Instruction, Experiments
	Access:	Students, Faculty, Staff, <i>Public</i>
	Frequency/Hours	Per semester schedule
	Adjacencies:	Physics/Engineering department, Top Floor integrated into building

CHARACTERISTICS	Ceiling Height:	Dome TBD
	Ceiling Treatment:	Dome / Acoustical ceiling tile at perimeter
	Floor Finish:	Carpet
	Wall Finish:	Painted gypsum board
	Acoustic Treatment:	Sound isolation required
	Natural Light:	None
	Casework:	Demonstration instruction bench/island at front of lecture Upper & lower cabinets in prep space as needed
	Accessories:	White Boards
	Hardware:	Card key access
	Other:	Tiered Seating

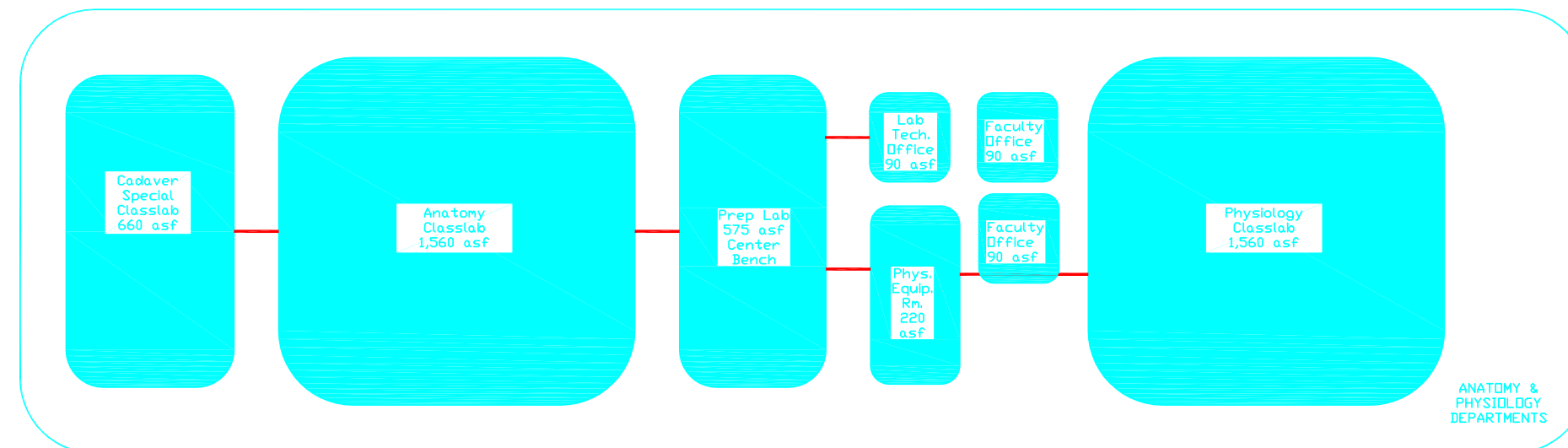
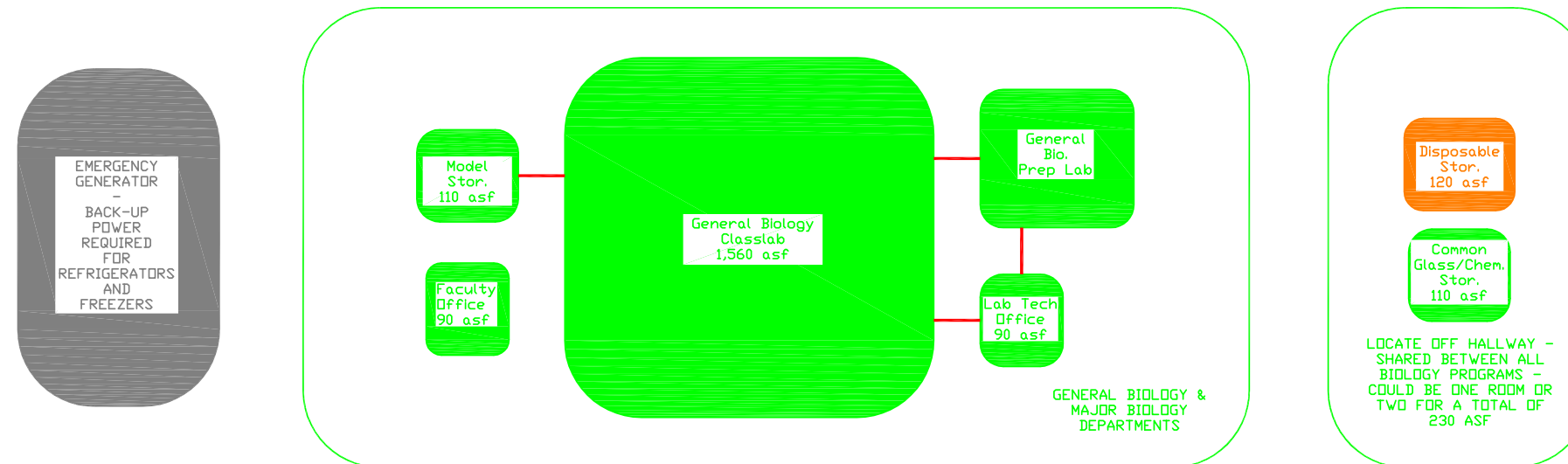
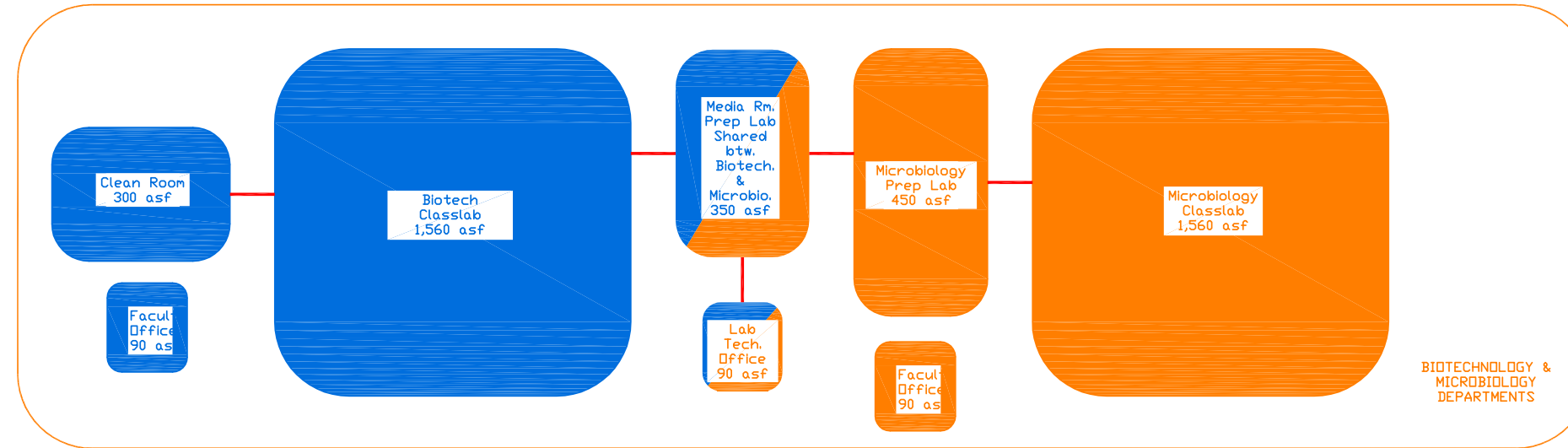
TECHNOLOGY	Audio / Visual:	2 projectors, screens, surround sound
	Network:	Wireless plus wall mounted network power
	Communications:	Phone / Data
	Security:	Secure – card key access
	Other:	Campus Clock

MECHANICAL, ELECTRICAL & PLUMBING	Ventilation:	Heating and cooling;
	Artificial Lighting:	Specialized Dome Lighting
	Fire Protection:	Sprinklers & smoke detectors as required
	Plumbing:	Sink with hot & cold water at demonstration island in lecture hall Sink with hot & cold water in prep room
	Other:	Power & data connections at island Power & data as required in prep space

EQUIPMENT & FURNISHINGS	This department is equipment heavy and has many special items (e.g. anatomy models). Exact equipment and special items to be relocated and furnished new is to be determined. Student seating, 1 Instructor stool for lecture space
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4 | Class Lab Diagrams

Biological Sciences Adjacencies



Biological Sciences Class Labs

GENERAL BIOLOGY

BIOLOGY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

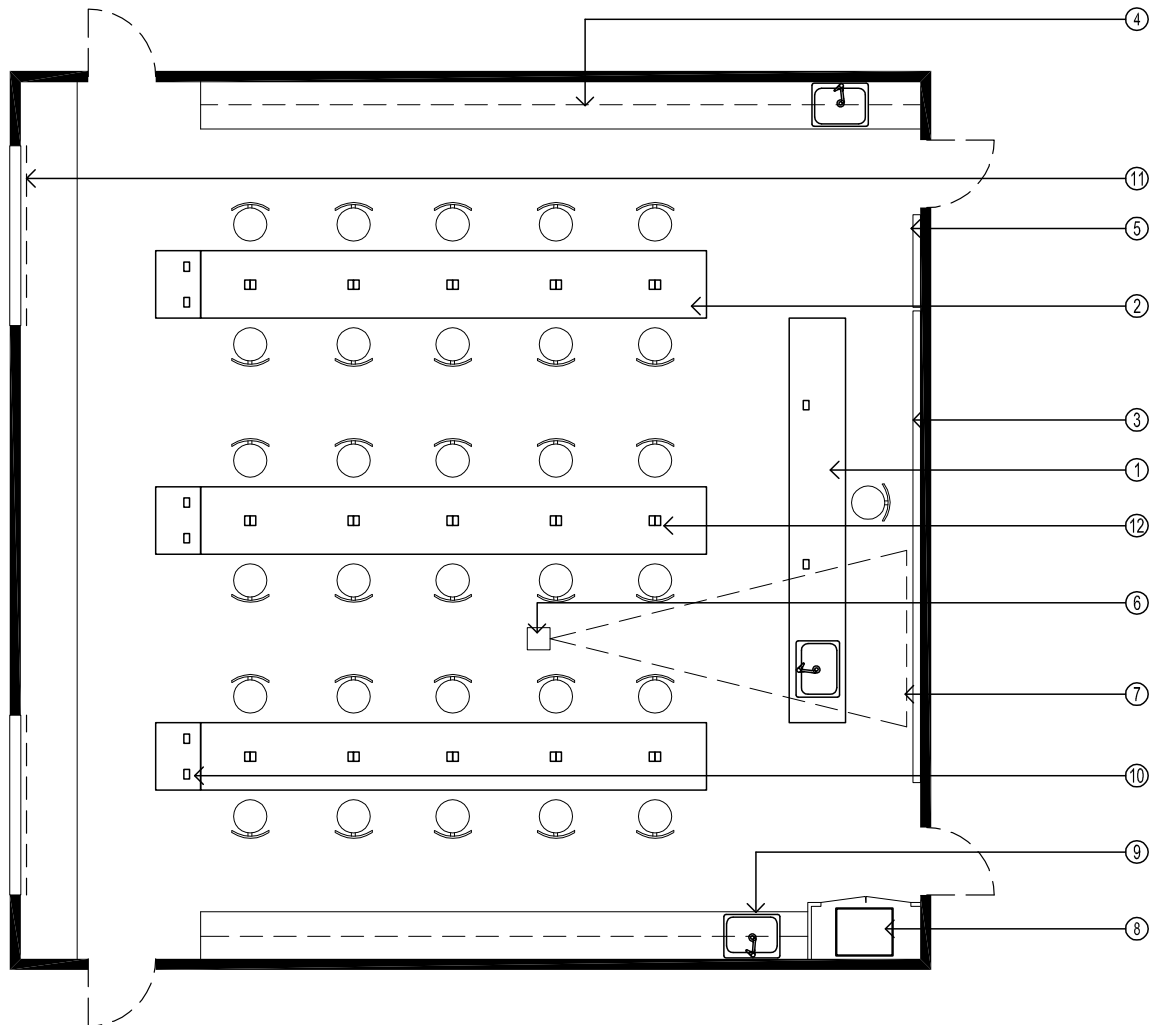
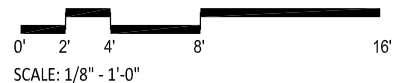


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|---|---|
| ① BUILT-IN DEMONSTRATION WORK BENCH WITH (4) POWER OUTLETS AND A SINK WITH HOT, COLD AND DI WATER | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② BUILT-IN STUDENT LAB BENCH | ⑨ EQUIPMENT SINK WITH HOT, COLD AND DI WATER |
| ③ SLIDING CHALKBOARD | ⑩ STANDING HEIGHT DEMONSTRATION WORK BENCH WITH (4) POWER OUTLETS AND STORAGE BELOW |
| ④ LOWER/UPPER CABINETRY AT PERIMETER WALLS AS NEEDED | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ (2) POWER OUTLETS PER STATION |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |



NOTE: ZONED LIGHTING AS NEEDED

BIOTECH LAB

BIOLOGY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

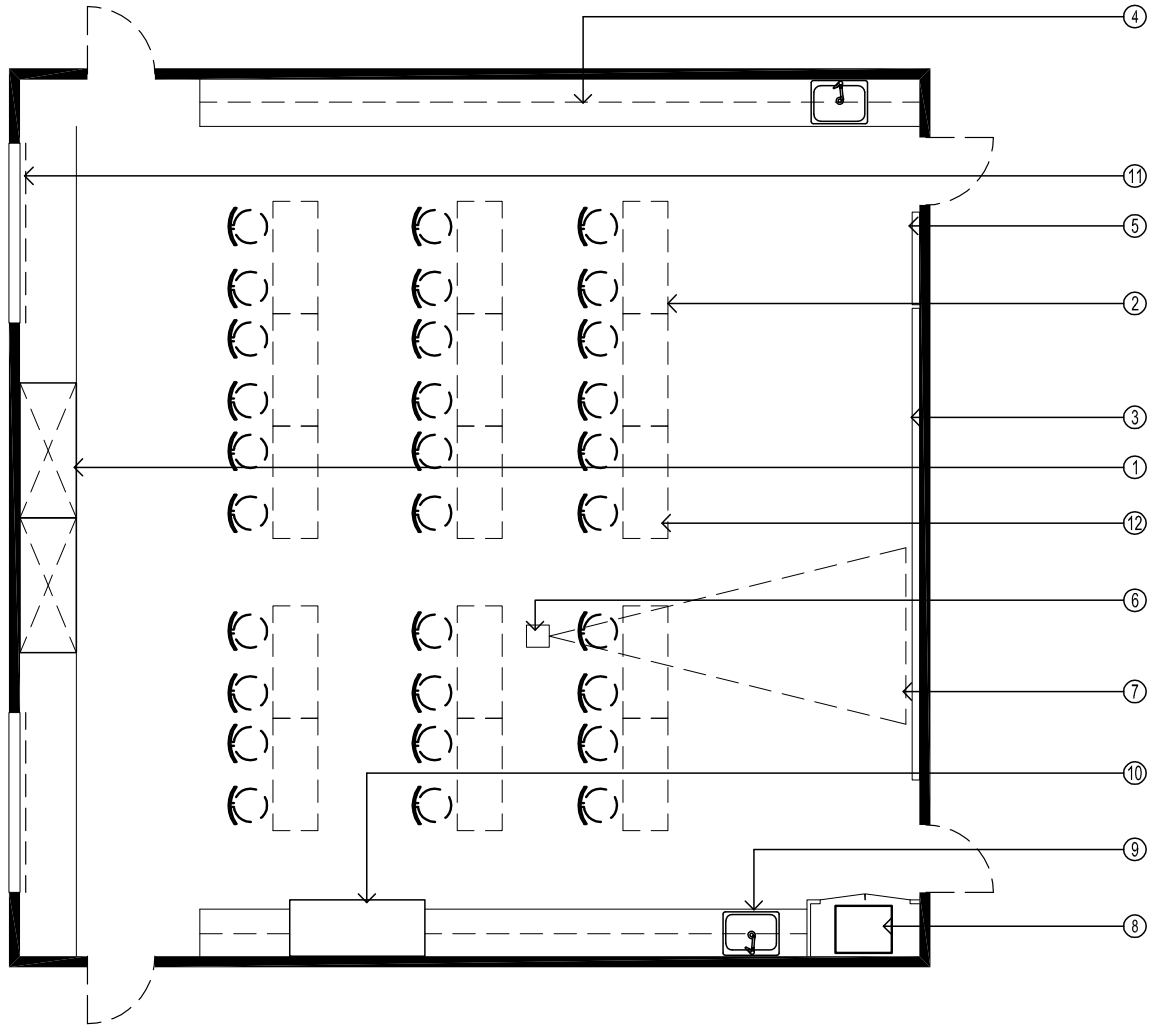
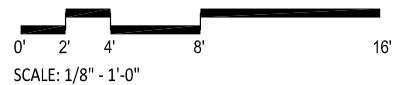


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|---|
| ① FUME HOOD AT PERIMETER WALL | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② MOVEABLE STUDENT LAB STATIONS WITH STORAGE - FURNITURE STYLE/SHAPE/SIZE TBD | ⑨ EQUIPMENT SINK WITH HOT, COLD AND DI WATER |
| ③ SLIDING WHITE BOARDS | ⑩ REFRIGERATOR WITH SLIDING GLASS DOORS TO STORE REAGENTS / ENZYMES |
| ④ LOWER /UPPER CABINETRY AT PERIMETER WALLS AS NEEDED | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ ELECTRICAL FLOOR MONUMENTS AS NEEDED FOR FURNITURE LAB STATIONS |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |

NOTE: ZONED LIGHTING AS NEEDED



MICROBIOLOGY

MICROBIOLOGY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

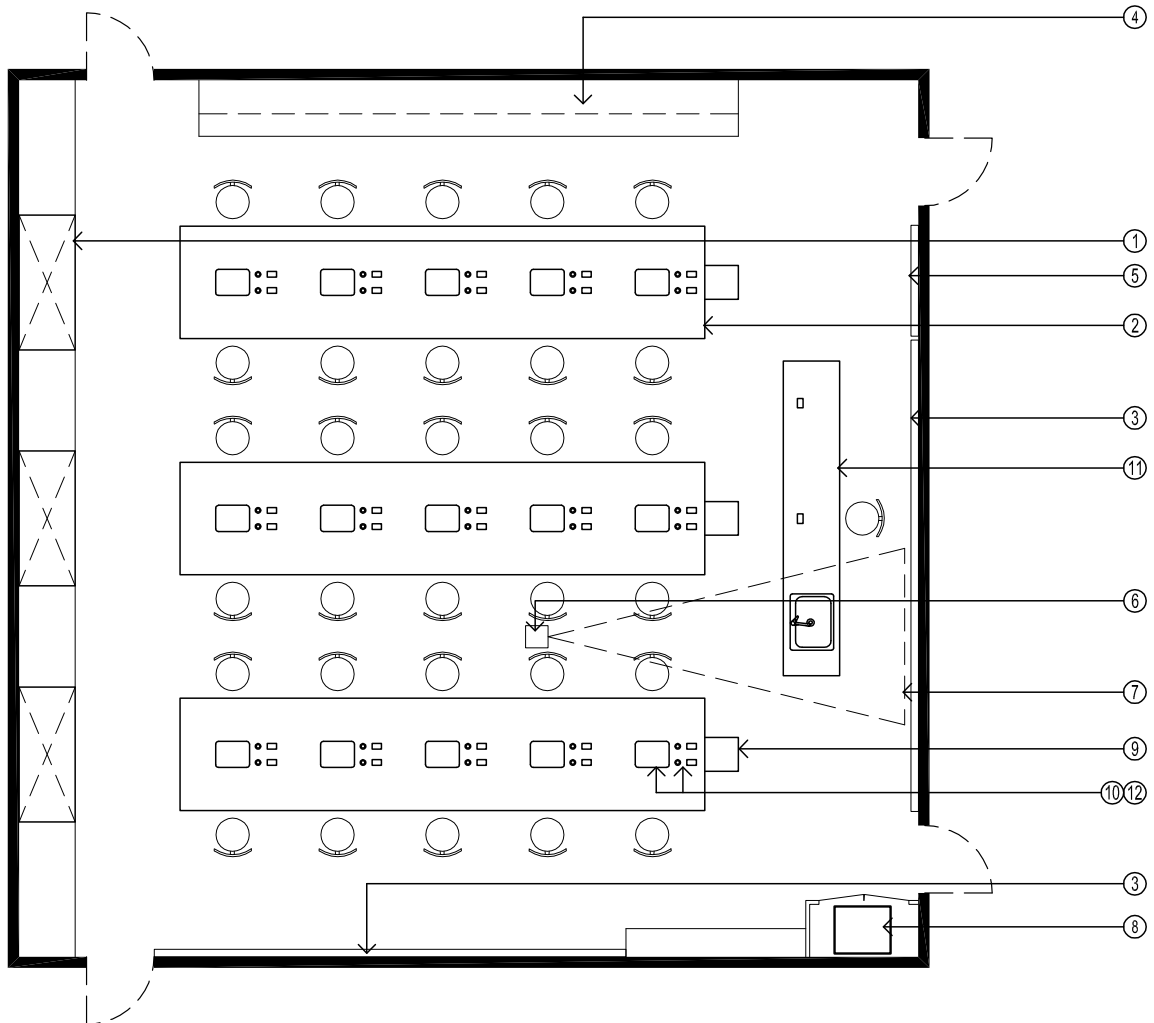
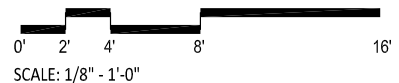


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|--|
| ① BIO-SAFETY FUME HOODS AT PERIMETER WALL WITH CABINETS BELOW | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② BUILT-IN STUDENT LAB BENCH | ⑨ HANDWASHING SINKS AT END OF STUDENT WORK BENCH |
| ③ SLIDING CHALK BOARDS | ⑩ SMALL SINK IN MIDDLE OF BENCH COLD & DI WATER; (1) PER (4) STATIONS |
| ④ LOWER /UPPER CABINETS AT PERIMETER WALLS AS NEEDED | ⑪ BUILT-IN DEMONSTRATION WORK BENCH WITH POWER OUTLETS, SINK WITH HOT, COLD & DI WATER, AND GAS & VACUUM OUTLETS |
| ⑤ BULLETIN BOARD | ⑫ GAS AND (2) POWER OUTLETS PER STATION |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |



NOTE: ZONED LIGHTING AS NEEDED

ANATOMY/PHYSIOLOGY

BIOLOGY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

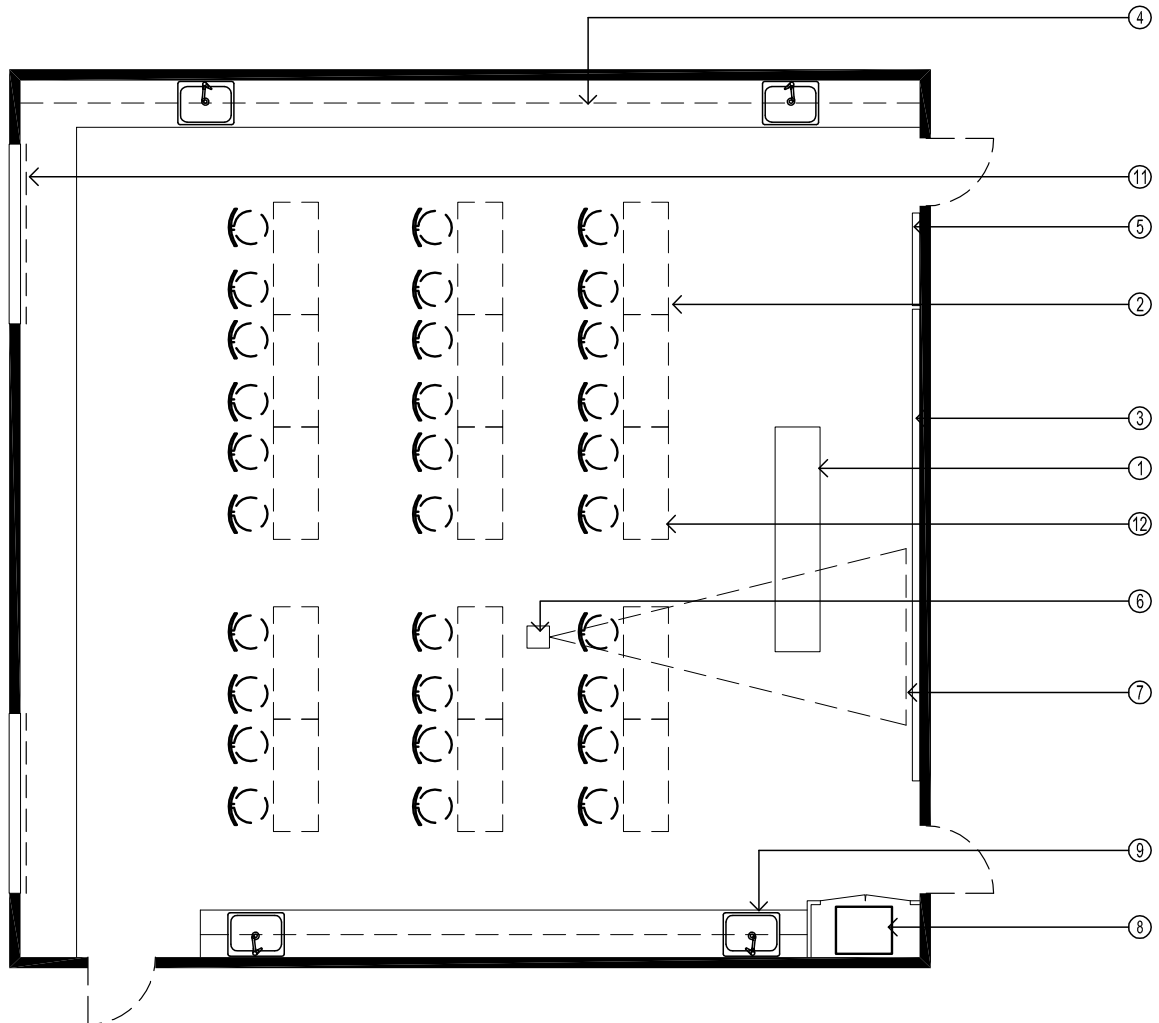
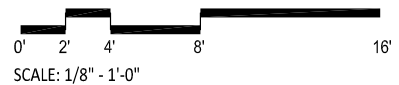


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|---|
| ① BUILT-IN INSTRUCTOR DEMONSTRATION STATION WITH SECURE STORAGE | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② MOVEABLE STUDENT LAB STATIONS WITH STORAGE - FURNITURE STYLE/SHAPE/SIZE TBD | ⑨ EQUIPMENT SINK WITH HOT, COLD AND DI WATER |
| ③ SLIDING WHITE BOARDS | ⑩ NOT USED |
| ④ LOWER /UPPER CABINERY AT PERIMETER WALLS AS NEEDED | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ ELECTRICAL FLOOR MONUMENTS AS NEEDED FOR FURNITURE LAB STATIONS |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |

NOTE: ZONED LIGHTING AS NEEDED



ANATOMY

CADAVER LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

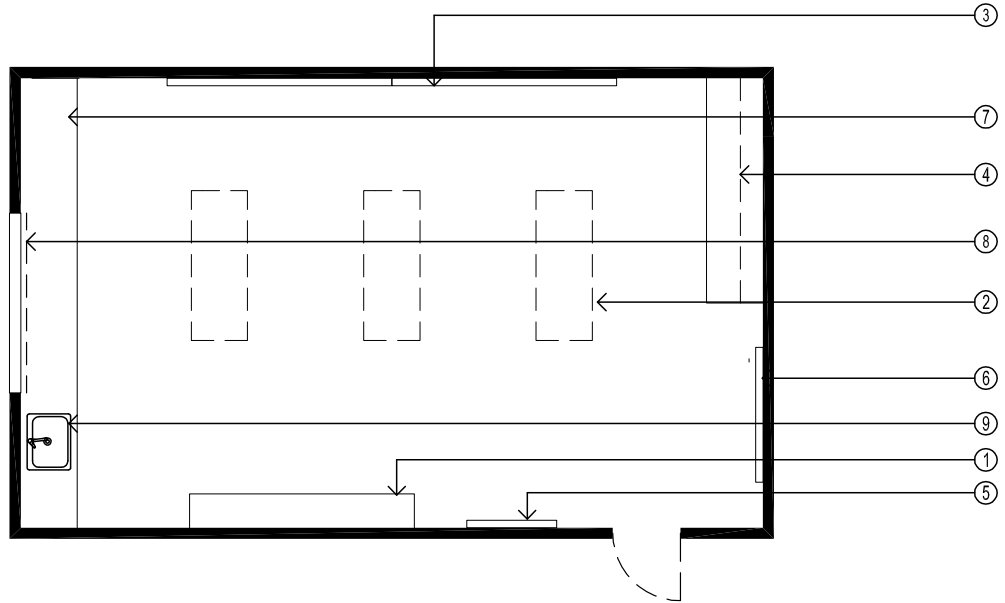
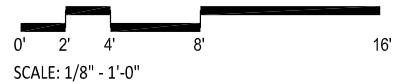


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|---|--|
| ① FULL HEIGHT STORAGE WITH GLASS DOORS | ⑧ SUN SHADES AT EXTERNAL WINDOWS |
| ② CADAVER GURNEY / VENTILATION STATION | ⑨ EQUIPMENT SINK WITH HOT, COLD AND DI WATER |
| ③ WHITE BOARDS | |
| ④ BONE STORAGE - LOWER /UPPER CABINETRY WITH COUNTERTOP | |
| ⑤ BULLETIN BOARD | |
| ⑥ LAB COAT RACK | |
| ⑦ UNDER COUNTER FREEZER | |



NOTE: ZONED LIGHTING AS NEEDED

Chemistry Class Labs

GENERAL CHEMISTRY

CHEMISTRY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

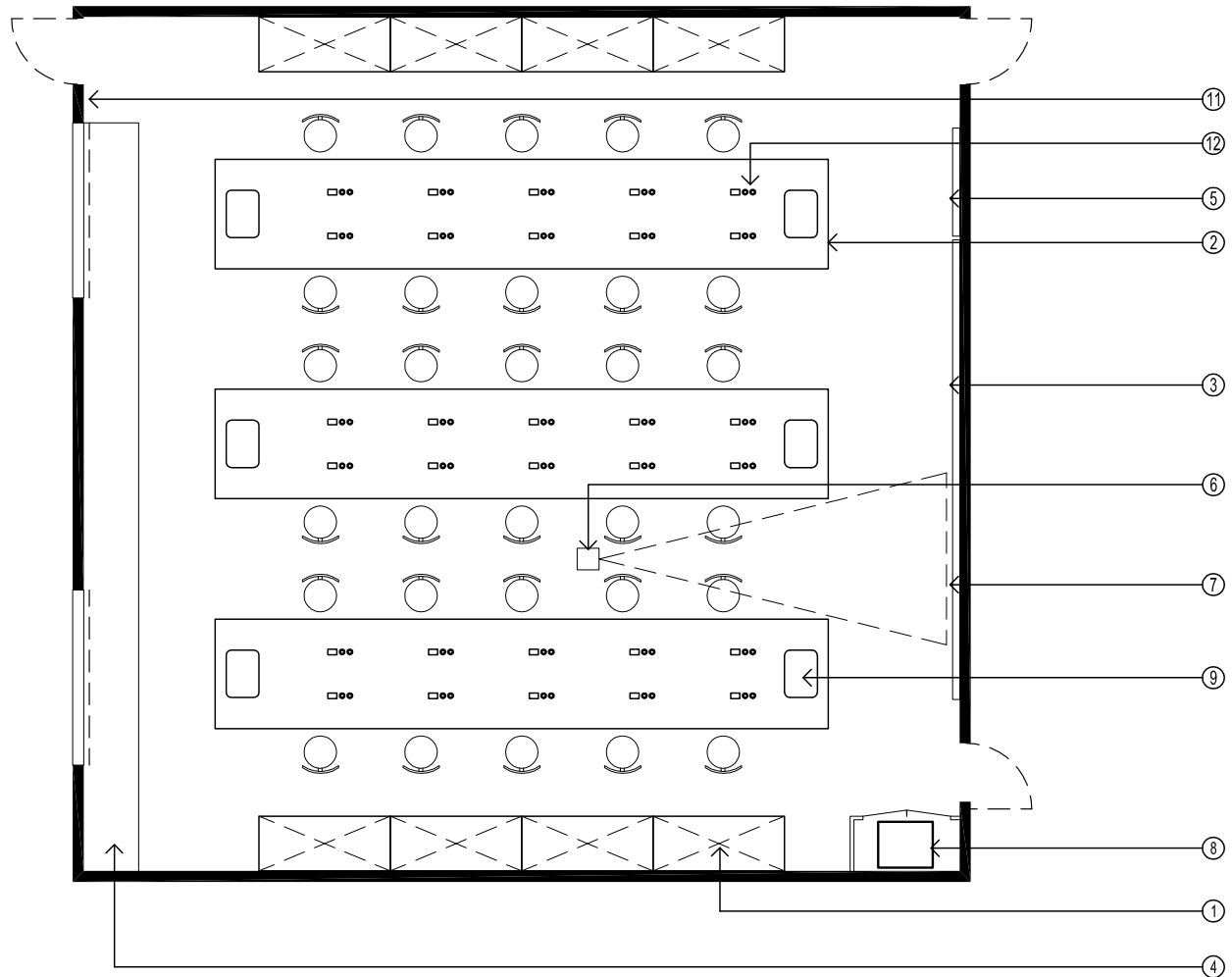
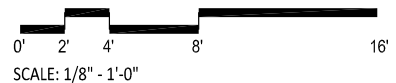


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|--|
| ① FUME HOOD AT PERIMETER WALLS WITH CABINERY BELOW | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② BUILT-IN STUDENT LAB BENCH | ⑨ SINK AT EACH END OF BENCH - COLD DEIONIZED (DI) WATER |
| ③ SLIDING CHALKBOARD | ⑩ NOT USED |
| ④ LOWER /UPPER CABINERY AT PERIMETER WALL WITH WINDOWS | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ VACUUM, GAS AND (2) POWER OUTLETS PER STATION |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |

NOTE: ZONED LIGHTING AS NEEDED



ORGANIC CHEMISTRY

CHEMISTRY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

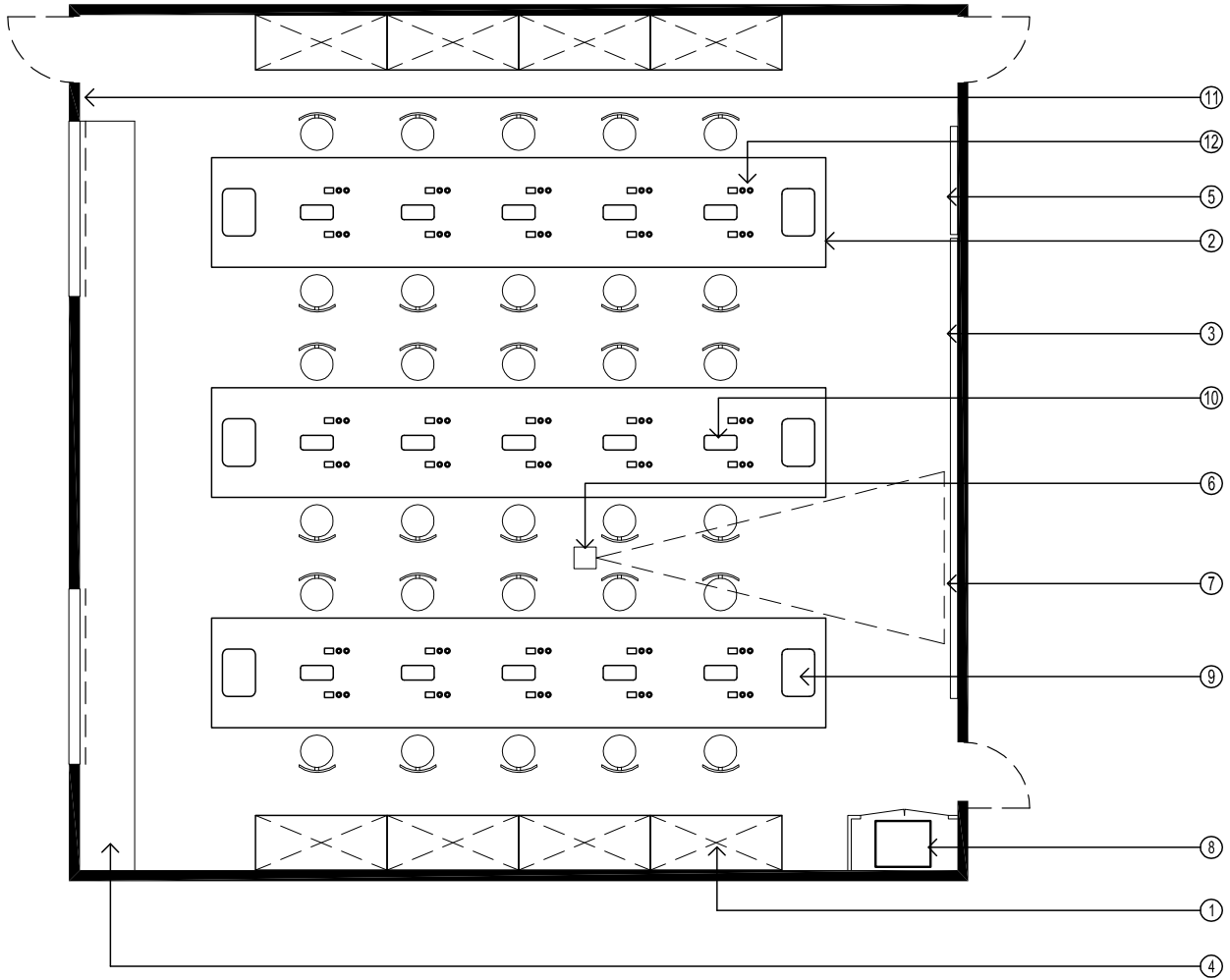
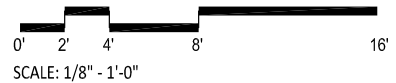


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|--|
| ① FUME HOOD AT PERIMETER WALLS WITH CABINERY BELOW | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② BUILT-IN STUDENT LAB BENCH | ⑨ SINK AT EACH END OF BENCH - COLD DEIONIZED (DI) WATER |
| ③ SLIDING CHALKBOARD | ⑩ SMALL SINK IN MIDDLE OF BENCH (ORGANIC CHEMISTRY ONLY) - REGULAR WATER |
| ④ LOWER /UPPER CABINERY AT PERIMETER WALL WITH WINDOWS | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ VACUUM, GAS AND (2) POWER OUTLETS PER STATION |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |

NOTE: ZONED LIGHTING AS NEEDED



INTRODUCTION TO CHEMISTRY

CHEMISTRY LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

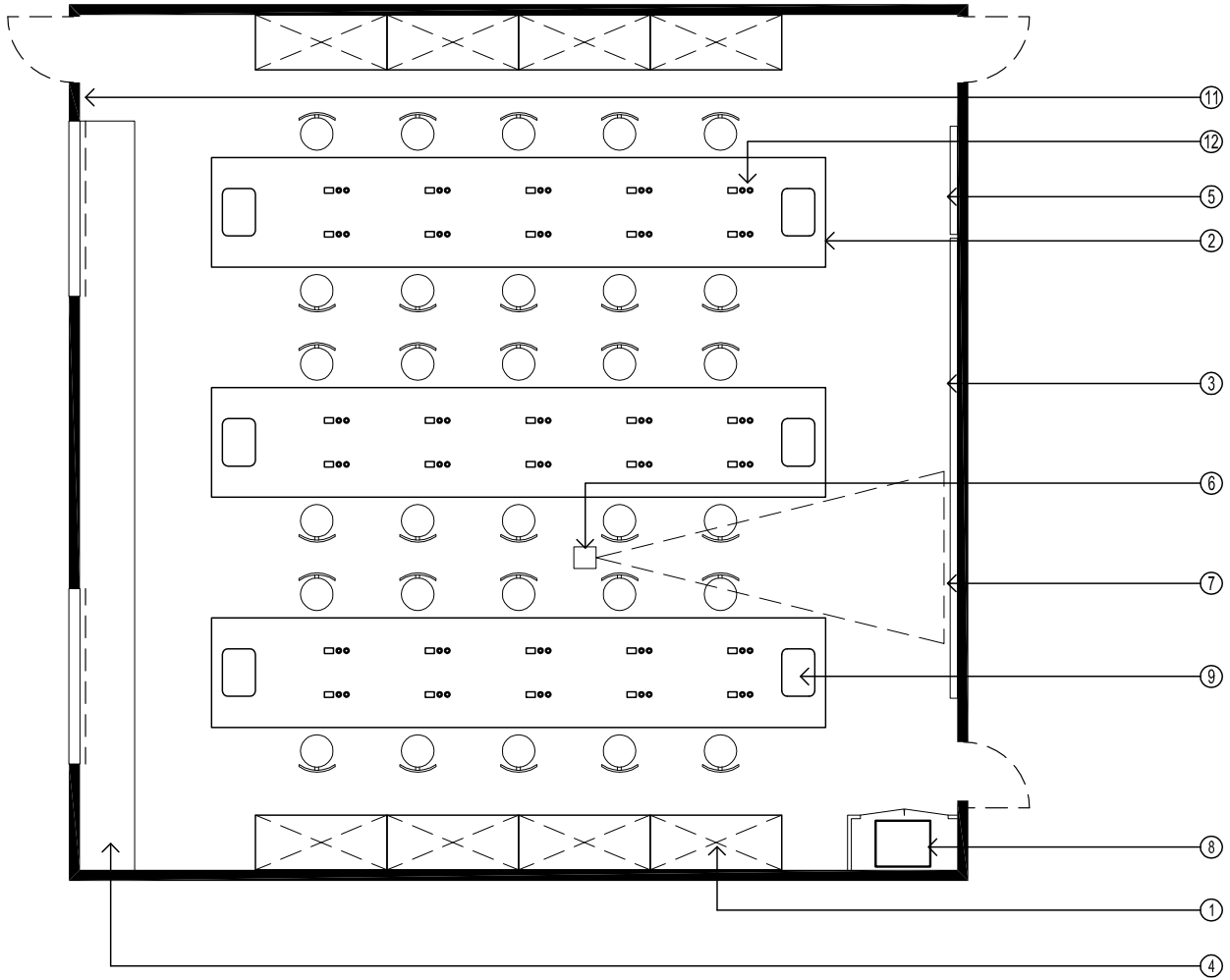
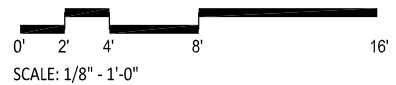


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|--|
| ① FUME HOOD AT PERIMETER WALLS WITH CABINERY BELOW | ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS |
| ② BUILT-IN STUDENT LAB BENCH | ⑨ SINK AT EACH END OF BENCH - COLD DEIONIZED (DI) WATER |
| ③ SLIDING CHALKBOARD | ⑩ NOT USED |
| ④ LOWER /UPPER CABINERY AT PERIMETER WALL WITH WINDOWS | ⑪ SUN SHADES AT EXTERNAL WINDOWS |
| ⑤ BULLETIN BOARD | ⑫ VACUUM, GAS AND (2) POWER OUTLETS PER STATION |
| ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) | |
| ⑦ MOTORIZED PROJECTION SCREEN | |

NOTE: ZONED LIGHTING AS NEEDED



Physics/Engineering Adjacency

TECH
WORKSHOP
275 ASF

EQUIP. STOR.
190 ASF

ALTERNATE:
MAKRER'S LAB
470 ASF

ENGINEERING/
PHYSICS LAB
1,560 ASF
(ALTERNATE 1,325 ASF)

PHYSICS LAB
1,560 ASF
(ALTERNATE 1,325 ASF)

Physics/Engineering Class Labs

PHYSICS

PHYSICS/ENGINEERING LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

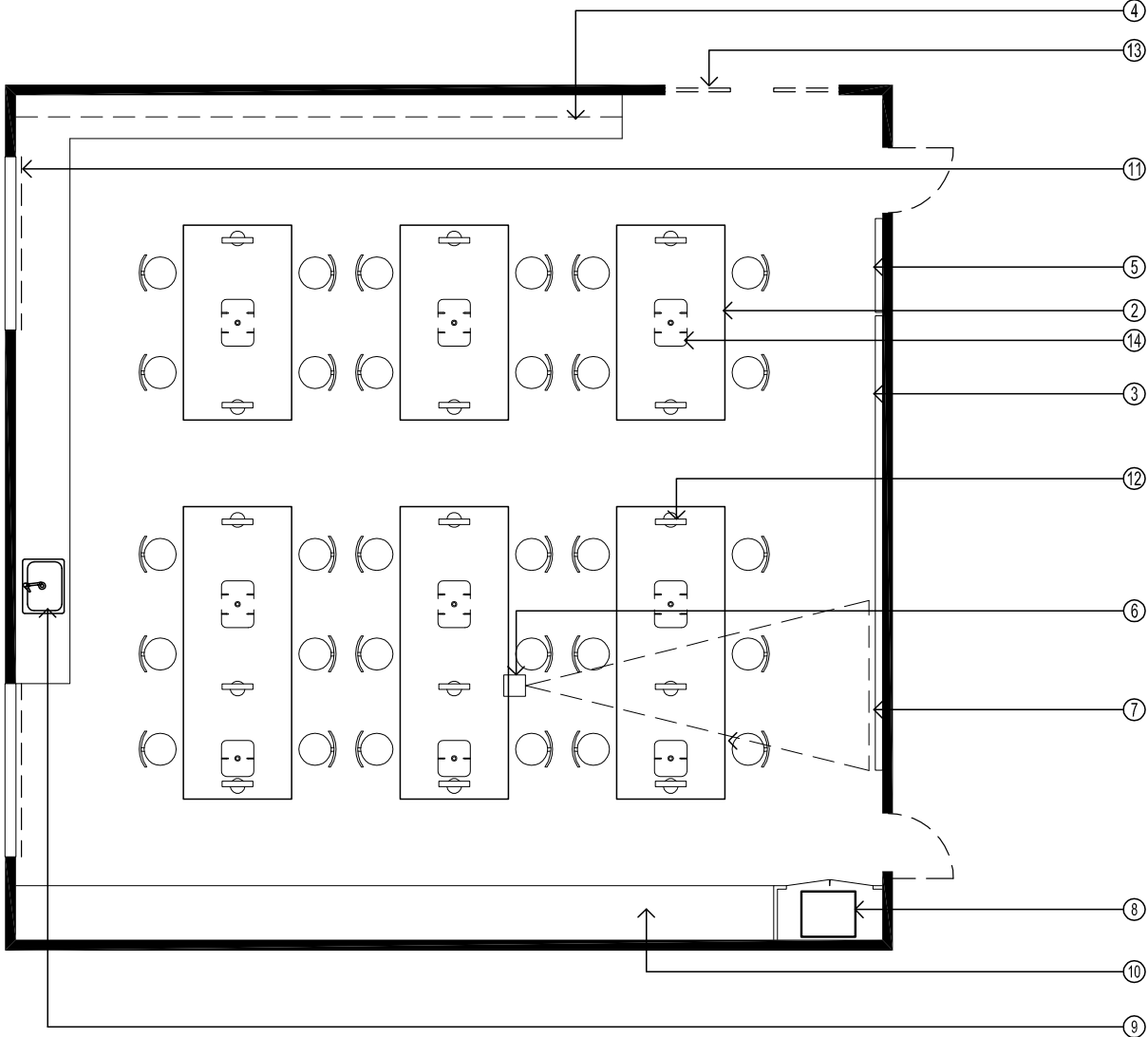
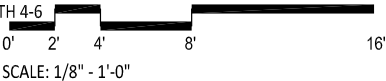


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- ① NOT USED
- ② BUILT-IN STUDENT LAB BENCH
- ③ SLIDING CHALKBOARD
- ④ LOWER /UPPER CABINETRY AT PERIMETER WALLS AS NEEDED
- ⑤ BULLETIN BOARD
- ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE)
- ⑦ MOTORIZED PROJECTION SCREEN
- ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS
- ⑨ EQUIPMENT SINK
- ⑩ FULL HEIGHT STORAGE
- ⑪ BLACK-OUT SHADES AT EXTERNAL WINDOWS
- ⑫ (2) SHARED COMPUTERS PER LAB BENCH
- ⑬ FULL HEIGHT SLIDING DOORS BETWEEN LABS
- ⑭ SINK IN MIDDLE OF STUDENT WORK BENCH WITH 4-6 FAUCETS OF COLD WATER



PHYSICS/ENGINEERING

PHYSICS/ENGINEERING LAB - 1560 SF (30 STUDENT STATIONS AT 52 ASF/STATION)

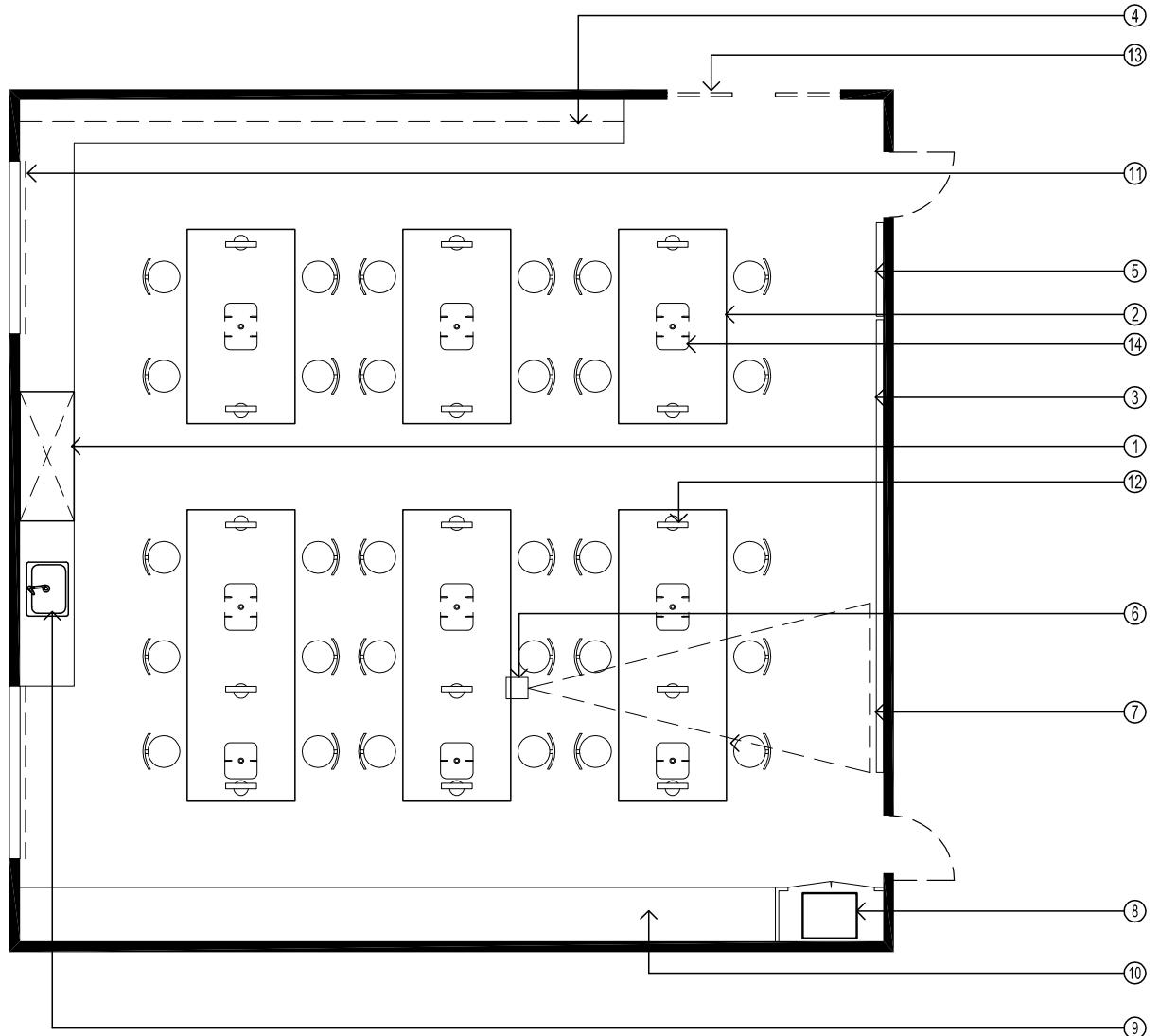
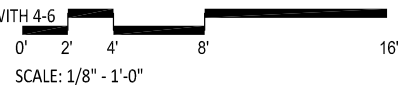


DIAGRAM FOR REFERENCE ONLY
ACCESSIBLE ACCOMMODATIONS TO BE PROVIDED PER CODE

LEGEND

- | | |
|--|--|
| <ul style="list-style-type: none"> ① FUME HOOD AT PERIMETER WALLS WITH CABINETY BELOW (ENGINEERING LAB ONLY) ② BUILT-IN STUDENT LAB BENCH ③ SLIDING CHALKBOARD ④ LOWER /UPPER CABINETY AT PERIMETER WALLS AS NEEDED ⑤ BULLETIN BOARD ⑥ CEILING-MOUNTED VIDEO-DATA PROJECTOR W/ NETWORK CONNECTIVITY (BUILT-IN READY TO UTILIZE) ⑦ MOTORIZED PROJECTION SCREEN | <ul style="list-style-type: none"> ⑧ AUDIO VISUAL EQUIPMENT RACK, AS REQUIRED BY CAMPUS STANDARDS ⑨ EQUIPMENT SINK ⑩ FULL HEIGHT STORAGE ⑪ BLACK-OUT SHADES AT EXTERNAL WINDOWS ⑫ (2) SHARED COMPUTERS PER LAB BENCH ⑬ FULL HEIGHT SLIDING DOORS BETWEEN LABS ⑭ SINK IN MIDDLE OF STUDENT WORK BENCH WITH 4-6 FAUCETS OF COLD WATER |
|--|--|



5 | Equipment Lists

EQUIPMENT LIST

Campus: Contra Costa College
 Project: New Sciences Building Programming
 Building: Physical Science (old)
 Room No. 1
 Date: 2/4/16

Chem. Instrument Room

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Compressor	C.A. Norgren Co. F07-100M/ITA	1	115 V	4.2 A	0	483 W	0		
2	Orbital Shaker	Daigger OR-120	1	110 V	2 A	0	220 W	0		
3	Computer Monitor	Samsung B1940MR	1	100-240V	0.7 A	~10 days/year	70-168 W	24		
4	Computer	N/A custom ISTO HP	1	115-250V		~10 days/year		24		future networking
5	Printer	MNH436511	1	110-127 V	4.0 A	~10 days/year	440-508 W	24		
6	EFT Spectrometer	Anasazi Instruments EFT-100-266	1			~10 days/year		24		
7	Shim Control	Anasazi Instruments B2000S-1000 Rev A	1			~10 days/year		24		
8	NMR Spectrometer	Varian EM300A	1			~10 days/year		24		Future networking
9	Uninterrupted Power Supply	APC LE1200	2	110-127 V	10 A	24	1200 W	0		
10	Permethem Magnet	Hitachi R-1200	1	115V		0		0		
11	AA	PerkinElmer B312 00051	1	230V		0		0		
12	AA Cooling System	PerkinElmer B2198072	1	230V	1.6 A	0	368 W	0		
13	Water Bath	Sheldon Manufacturing 13309 T04	1	120 V		0	600 W	0		
14	AFM Electronic Control Unit	TopoMetrix TMX 2000	1	120 V	3 A	0	360 W	0		
15	AFM Scanning Probe Microscope	TopoMetrix TMX 1010	1			0		0		

EQUIPMENT LIST

Campus: Contra Costa College
 Project: New Sciences Building Programming
 Building: Physical Science (old)
 Room No. 1

Date: 2/25/16

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	AFM Decoder	TopoMetrix PR 1000	1	120 V	0.3 A	0	96 W	0		
2	B/W Picture Monitor	TopoMetrix PM-1009	1	120 V	0.3 A	0	36 W	0		
3	Desktop Computer	Dell Optiplex GX 110/MMP	1	115/230V	6A/3A	0	690 W	0		
4	Computer Monitor	Dell M770	1	100-240V	1.8-0.9A	0	180-216 W	0		
5	Printer	HP LaserJet 2106bn	1	110-127V	3.6 A	0	316-457 W	0		
6	Computer Monitor	Dell UltraScan P990	1	100-240V	1.7-1.2A	0	170-288 W	0		
7	Desktop Computer	Dell Optiplex GX280	1	120 V	5 A	0	600 W	0		
8	Printer	LaserJet 1020	1	110-127V	3.5 A	0	385-445 W	0		
9	IR Monitor	Perkin Elmer/McIntag M401	1	100-240V	1.5 A	~30 days/year	150-360 W	24		
10	FTIR	Perkin Elmer L-118-Z010	1	120V	2.5A	~30 days/year	300 W	24		
11	Printer	DeskJet 842C	1	120V	1 A	~30 days/year	120 W	24		
12	Oven	Sybron Thermolyne 1900	1	120 V	8.8 A	~2 days/year	1056 W	0		
13	Shop Vac	Craftsman 113.177415	1	120 V	7.3 A	~5 days/year	876 W	0		
14										
15										

EQUIPMENT LIST

Campus: **CONTRA COSTA COLLEGE**

Project: **New Sciences Building Programming**

Existing Building: **Physical Science (old)**

Room Name: **2**

Date: **2/20/16**

Storage

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Air Compressor	Dayton Electric Mfg. Co. 5F222B	1	120V	10A	24 days/year	1200W	0		
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EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 4

Date: 2/26/16

Lab Service off of #6 Organic Lab.

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Desktop Computer	Dell Optiplex Gx110	2	115/230V	6.9A/3A	twice/month	690W	24		future networking
2	Computer Monitor	Dell M77P	2	100-240V	1.8-0.9A	twice/month	180-216W	24		
3	Uninterrupted Power Supply	AFC LE6000	2	120V	5A	24	600W	0		
4	GC	Gow-Mac 69-35P	2	115V	7.8A	twice/month	900W	24		
5	Refrigerator	RCA	1	120V		24		0		
6	Refrigerator (explosion proof)	VWR	1	120V		24		0		
7	UV Lamp	Ultra-Violet Prod. Inc. UVG-54	3	115V	0.16A	twice/year 2 days/year	18.4W	0		used in PS 5, stored in PS 4
8	Soldering Station	Elenco Electronics, Inc. SL-5	2	120V		twice/month 4 days/year	539-622W	24		used in PS 6, stored in PS 4
9	Printer	HP LaserJet P1006	1	110-127V	4.9A					
10	Heat Guns	MHT Products, Inc. 5006	5	120V	12.4A		1440W	0		
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EQUIPMENT LIST

Campus: Contra Costa College
 Project: New Sciences Building Programming
 Building: Physical Science (old)
 Room No. 5
 Date: 2/25/16

General Chemistry II

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Hot Plate	Corning PC-400BE	8	120V	5.3A	~1 day/week	636W	0		
2	Hot Plate	Corning PC-200	2	120V	4.6A	~1 day/week	555W	0		
3	Hot/Stir Plate	Corning PC-320	2	120V	4.8A	~1 day/week	575W	0		
4	Hot Plate	Corning PC-35 VWR	1	120V	5A	~1 day/week	600W	0		
5	Stir Plate	58135-250	1	120V	0.04A	~1 day/week	5W	0		
6	Fan	LA54D 3733	1	120V	0.3A	~4 days/year	96W	0		
7	Oven		1	120V		0		0		
8	Fume Hoods	Hamilton PL152	4			~2 days/week				
9	Balance	Mettler PM304E	2	120V	0.08A	1	9.6W	23		
10	Desktop Computer	Dell Optiplex GX110/MMP	1	115/230V	6A/3A	0	690W	0		
11	Computer Monitor	Dell M17P	1	100-240V	1.8-0.9A	0	180-216W	0		
12	AA	Perkin Elmer AAAnalyst 100 CTX	1	120V	6.25A	~6 days/year	248W	0		
13	Computer Monitor	VLS60	1	120V	1.6A	~6 days/year	192W	24		
14	Desktop Computer uninterruptible Power Supply	Venturis 5100Z APC LE1200	1	120V	5.5A	~6 days/year	660W	24		
15	Supply	HP DESKJET 6720	1	110-127V	10A	24	1200W	0		
	Printer		1	120V	0.22A	0	26.4W	0		

EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 5

Date: 2/25/16

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	GC/MS	Norian 37492 Gas Chromatograph	1	120V		~3 days/year		24		
2	GC/MS	Norian Saturn 2000 GC/MS MS	1			~3 days/year		24		
3	Desktop Computer	Dell Optiplex 745 X2gen	1	120V	6A	~3 days/year	720 W	24		future networking
4	Computer Monitor	MWJFR HP	1	120V	1.1 A	~3 days/year	132 W	24		
5	Printer	DesJet 842C	1	120V	1 A	~3 days/year	120 W	24		
6	Spec 20	Milton Roy Co. Spectronic 20	10	120V	0.3A	0	36 W	0		
7	Desktop Computer	Dell	1	120V	5A	0	600 W	0		
8	Computer Monitor	Dell GT1P	1	120V	1.6A	0	192 W	0		
9	Balance	Mettler AE204 DeltaRange	4	120V	0.08 A	0	9.6 W	24		
10	pH Meters	Beckman 51211	18	120V	0.025 A	~15 days/year	3 W	0		
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EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 6

Date: 2/26/16

General Chemistry 4
Organic Chemistry

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Oven	Bille M OV-472A-2	1	120V	8.3A	0	1000W	0		
2	Melting Point Apparatus	Stuart SMP14	7	120V	0.625A	~3 hours/day	75W	0		
3	Balance	Mettler PI 320 Delta Range	3	100-120V	0.08A	6	8-9.6W	18		
4	Variac	Staco Inc. 3PN 581	26	120V	5A	~3 hours/day ~5 days/year	600W	0		only use 5
5	Oven	Chromalox AR-2519	1							
6	Balance	Mettler PM360	1	100-120V	0.125A	0	12.5-15W	0		
7	Fume Hoods		4			~4 days/week				
8	Hot Plate	Corning PC-2488	1	120V	4.6A	~3 hours/day	555W	0		
9	Hot Plate	Corning PC-4488B	3	120V	5.3A	~3 hours/day	628W	0		
10	Hot Plate	Corning PC-35	2	120V	5A	~3 hours/day	600W	0		
11	Hot/Stir Plate	Corning PC-351	1	120V	5.125A	~3 hours/day	615W	0		
12	Hot/Stir Plate	Corning PC-424	57	120V	5.8A	~3 hours/day	698W	0		Each when student has 1
13	Stir Plate	Corning PC-414	2	120V	0.6A	0	73W	0		
14	Centrifuge	Precision Scientific Co.	6	115V	1.2A	~1 hour/day	80W	0		only use 3 total in PS 6 but 8 in PS 5
15	Centrifuge	Fisher Scientific	4	115V		~1 hour/day		0		
	Ice Machine	Scottsman				24		0		

EQUIPMENT LIST

Campus: **CONTRA COSTA COLLEGE**

Project: **New Sciences Building Programming**

Existing Building: **Physical Science (old)**

Room Name: **6**

Date: **2/26/16**

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Fan	Shel Electric Mfg. Co. SP18	1	120V	0.7A	~1 week year	84 W	0		
2	Heating Mantle	Globe-cat	~ 100	115V		~ 1 day year		0		
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EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 10

Date: 2/25/16

Lab Coordinator Office

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Desktop Computer	Dell Optiplex 3910	1	120V	4.4A	11	528W	13		networking
2	Computer Monitor	Dell 1908FPT	1	120V	1.5A	11	528W	13		
3	Printer	HP OfficeJet 4620	1	100-240V	0.6A	1	60-144W	23		
4	Fan	Bionaire BT415	1	120V	0.6A	~1 week/year	72W	0		
5	Balance	Acculab	3	120V	0.055A	~9 days/year		0		used in PS 14, stored in PS 10
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EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 14

Date: 2/25/16

Intro to Chemistry

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Hot Plate	Corning PC410A/B	7	120V	5.3A	~ 1 day/week	6036 W	0		
2	Hot Plate	Corning PC35	5	120V	0.42A	~ 1 day/week	50 W	0		
3	Hot Plate	Corning PC370	1	120V	4.6A	~ 1 day/week	555 W	0		
4	Balance	Mettler PM360	5	120V	0.125A	1	15 W	28		
5	Fume Hoods		4			~ 4 days/week				
6	Fan	Lasko Type 20 Zenith	2	120V	1.1A	~ 4 days/year	132 W			
7	TV	Sylvania PMS61C	1	120V	0.96A	0	115W	0		
8	VCR/DVD Player	PV-D4744 RCA Corporation	1	120V	0.23A	0	28 W	0		
9	Oven	23L	1	120V		0		0		
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EQUIPMENT LIST

Campus: CONTRA COSTA COLLEGE

Project: New Sciences Building Programming

Existing Building: Physical Science (old)

Room Name: 12

Date: 2/26/16

Chemistry Stock Room

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	Balance	Mettler PT 3000	1	100-120V	0.125A	1	12.5-16W	23		
2	Boambox	Magnavox DS623	1	120V		11		13		
3	Hot/Stir Plate	Corning PC-101	2	120V	11A	~ 2 hours/ week	1300 W	0		
4	Hot/Stir Plate	Corning PC-351	1	120V		~ 2 hours/ week		0		
5	Hot/Stir Plate	VWR 320	1	120V	7.3A	~ 2 hour/ week	865 W	0		
6	Hot/Stir Plate	Fisher Scientific 210T	2	115V	8.7A	~ 2 hour/ week	1000 W	0		
7	Hot/Stir Plate	Corning PC-420D	1	120V	5.9A	~ 2 hours/ week	698 W	0		
8	Schicador		1	120V		3		21		
9	Dishwasher	Bosch	1	120V		~ 1 day/ month		24		
10	Ammeter	EVID	10	120V	0.07A	~ 5 days/ year	8 W	0		used in PS 6, shared in PS 12
11	D.I. Water System			120V	0.008A	24	1 W	0		
12										
13										
14										
15										

EQUIPMENT LIST

Campus: **CONTRA COSTA COLLEGE**

Project: **New Sciences Building Programming**

Existing Building: *list the existing building you are located in*

PHYSICAL SCIENCE
(JEFF KAMALIAN'S SHOP)

Room Name: *as noted on the room Data sheet* **N-17**

Date: **2/26/16**

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	DRILL PRESS	ATLAS 2730	1	120VAC	6A	6	720W			USED AT
2	BAND SAW	ROCKWELL	1	120VAC	7A	0	840W			RANDOM
3	BELT/DISK SANDER	RILEY PRECISION TOOL CO. EMERSON 8-418	1	120VAC	NO SPEC LISTED	0	—			
4	MILL	BENCH MASTER VIN 111	1	120VAC	8.6A	0	1032W			
5	LATHE	LOGAN ENG. CO. 821	1	120VAC	NO SPEC LISTED	0	—			
6	RECIPROCATING HACKSAW	KELLER-POWER HACKSAW	1	120VAC	6.4	0	720W			
7	SHOP VAC	CRAFTSMAN 758	1	120VAC	11A	0	1320W			
8	AIR COMPRESSOR	CAMPBELL HAUSFELD 1120665	1	120VAC	17.8A	0	2136W			
9	TEST EQUIPMENT PACK	MISL. EQUIP	1	120VAC	70A	1	1200W			
10	PC DESKTOP	DELL OPTIPLEX 3010	1	120VAC	4.4A	8	528W			
11	COMPUTER MONITOR	DELL 1908 FPT	1	120VAC	1.5A	8	180W			
12										
13										
14										
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EQUIPMENT LIST

Campus: **CONTRA COSTA COLLEGE**

Project: **New Sciences Building Programming**

Existing Building: *list the existing building you are located in*

Room Name: *as noted on the room Data sheet*

Date: **2/26/10**

**PHYSICAL SCIENCE
PHYSICS/ENGINEERING LABORATORY**

Item No.	Type of Equipment	Manufacturer & Model Number	Total Number of Units	Volts	Amps	Average Daily Hours in Operation	Operation at Heat Output	Average Daily Hours in Standby	Stand by Heat Output	Other Info.
1	OVEN	THERMOLINE CORP. CPS-4022P	1	240VAC	35A	10M/YEAR	8400W			4 Hours
2	OVEN	PARAGON INDUS. HTO	1	120VAC	15A	10M/YEAR	1800W			4 Hours
3	PC DESKTOP COMPUTER	DELL OPTIPLEX 3010	7	120VAC	4.4A	8	528W			
4	MONITOR	DELL 1908 FPT	7	120VAC	1.5A	8	180W			
5	PRINTER	HP CB366A	1	120VAC	4.9A	8	588W			
6	DC POWER SUPPLY	SOLA CONSTANT VDCPS	6	120VAC	2A	8	240W			
7	3-D PRINTER	TYPE A MACHINES SERIES I	1	120VAC	NO SPEC LISTED	0	-			USED AT RANDOM
8	OSCILLOSCOPE	OS-5030A	8	120VAC	1A	50 DAYS/YEAR	120W			4 Hours
9	OSCILLOSCOPE	TEKTRONIX	2	120VAC	1A	50 DAYS/YEAR	120W			4 Hours
10										
11										
12										
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