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<b>Meeting Location</b>	LHU- Ulmer Bldg.	<b>Client</b>	Lock Haven University
<b>Meeting Date/Time</b>	Sept. 23, 24 & 25, 2009	<b>Project</b>	East Campus Science Center
<b>Subject</b>	Programming Meetings	<b>Project No.</b>	
<b>Participants</b>	See Attached List	<b>Notes Prepared By</b>	S. Ortega
<b>Date Issued</b>	October 8, 2009	<b>File</b>	JCI MM 9-23-09 to 9-25-09

**cc:** Keith Roush- LHU  
 Avery Gretton- HA  
 Rick Honeywell- JCI/GPR

Notes	Action
<p>Physics Dept.                      Sept. 23, 2009                      12:15PM-1:10PM                      Ulmer Rm. 221</p> <ol style="list-style-type: none"> <li>Dept. currently has (8) faculty offices and require (1) additional office for future. Faculty office size to be 150sf. Provide (1) Admin. Office including Mail/Copy/Fax (Shared by entire department).</li> <li>Physics Dept. distributed list of current and proposed lab requirements for reference (Attached).                       The Nano Tech Group submitted a description of their research facility and needs (Attached).</li> <li>Discussed the physics courses, sizes of classrooms, laboratories, support spaces and number of students-                             <ul style="list-style-type: none"> <li>(24) Students – Physical Science</li> <li>(24) Students – General Physics Lab (NEW)</li> <li>(24) Students – Introductory (4 Courses)</li> <li>(24) Students – Intermediate/General Physics                                     <ul style="list-style-type: none"> <li>• Currently with (12) students</li> </ul> </li> <li>(12) Students – Modern/Electronics (Upper Division)                                     <ul style="list-style-type: none"> <li>• Plan for 16 Students</li> <li>• Room can be shared with Optics/Advanced</li> <li>• Require 150sf room for radiation storage. No special venting or shielding required.</li> </ul> </li> <li>(12) Students – Optics / Advanced                                     <ul style="list-style-type: none"> <li>• Room can be shared with Modern/Electronics</li> </ul> </li> </ul> </li> </ol>	

- Require darkroom (NEW)
- No windows
- Require (1) Support Room (with additional 50sf of storage desired)

Education Resource (Currently in ECJ 307)

- Not a classroom
- Require conference size table, storage for books, equipment and computer access.

(24) Students – Computer Room/Classroom (Shared with other Depts.)

- Currently with (16) students
- Room to be used for engineering graphics, meteorology, computer engineering and GIS.

(20) Students – Reading Room (Student Study)

- Provide space for periodicals
- Room use for (10) graduate students/year

4. A (50) student size Planetarium (Astronomy) is desired by the Dept. Room size about 900sf. This room can also be used as classroom.
  - a. Astronomy Storage (Locate adjacent to Planetarium. Storage is needed if Planetarium is not used.
5. Electronic Shop Requirements-
  - a. Drill press
  - b. Workbench
  - c. Circular/radial saw
  - d. Soldering
  - e. Provide at least (2) 208 outlets
6. Nano Tech Facility currently occupies approx. 2,800sf to 3,000sf of space @ ECJ.  
New facility requires-
  - a. Clean Room with 100,000 Classification
  - b. Space for SEM, Microscopes other equipment.
  - c. Gas services
7. HA/JCI requested list of chemicals and quantities used by the Dept. for evaluation with applicable codes.  
LHU has not identified the EOHS (Environmental & Occupational Health & Safety) person to work with the Design Team at this time.
8. J. Wheeler gave tour of existing physics labs, classrooms and support rooms in Ulmer for JCI and HA folks.  
M. TZolove gave tour of the labs in EJC.

9. One existing equipment in ECJ, requires a 10'-0" clear height ceiling. The Dept. plans to relocate this unit (See photo) inside the proposed clean room. Possible vertical clearance issue.



Chemistry Dept.  
Sept. 24, 2009  
11:00AM-11:50AM  
Ulmer Rm. 304

1. Dept. currently has (8) faculty offices and require (2) additional offices for future. Faculty office size to be 150sf.
2. Discussed the chemistry courses, sizes of classrooms, laboratories, support spaces and number of students-
  - (20) Students – Organic Chemistry Lab
    - Currently with (16) students plus (2) make-ups.
    - (1) 4ft fume hood/student
    - Prep Lab
  - (24) Students – General/Principles of Chemistry Lab
    - Plan for (26) students
    - Provide (1) ADA workstation/bench
    - (4) 6ft. student fume hoods
  - (20) Students – Biochemistry/Intro Organic Lab
    - Currently with (18) students
    - Room layout similar to Organic Chemistry
    - Prep Lab
  - (30) Students – Forensic/Chem 101 Lab
    - Current lab has (1) fume hood. Additional fume hoods desired.
  - (16) Students – Physical Chemistry Lab
    - Currently capped at (12) student due to limited space
    - Provide space for instrumentation
    - Prep Lab and storage space
    - Provide write-up stations within lab.
  - (16) Students – Advanced Synthesis Lab
    - Prep Lab
    - Provide nitrogen closet/manifold
    - (2) students per fume hood
  - (16) Students – Quantitative/Analytical Chemistry Lab

<ul style="list-style-type: none"> <li>• Currently with (12) students</li> <li>• Separate room for balance desired</li> <li>• 6ft fume hood (Non-student hood)</li> </ul> <p>3. Instrumentation Lab requires-</p> <ol style="list-style-type: none"> <li>a. Provide (12) write-up stations</li> <li>b. (1) 6ft fume hood (Non-student hood)</li> <li>c. Provide spaces for the following equipment: <ul style="list-style-type: none"> <li>• (1) NMR</li> <li>• (1) FTIR</li> <li>• (3) GC/MS</li> <li>• (1) Electro</li> <li>• (1) UV</li> <li>• (1) AA (PE)</li> <li>• (1) HPLC</li> </ul> </li> </ol> <p>4. Additional Dept. Requirements-</p> <ol style="list-style-type: none"> <li>a. (5) Research labs. Dept. currently has (4) research labs.</li> <li>b. (10) Faculty research labs.</li> <li>c. Shared Conference Room is desired.</li> <li>d. Multi use room for student lounging, writing area and hold faculty meetings.</li> <li>e. Storage/Equipment (Can be stored in Lab Instruments)</li> <li>f. Computer Room (Can be shared with other Depts.)</li> <li>g. D.I. water service required to labs and procedure rooms.</li> <li>h. Glassware washers for Gen. Chemistry. Existing washers currently located in Ulmer Rms. 120/121</li> </ol> <p>5. Chemical Storage with small office for manager desired (Future).</p> <p>6. HA/JCI requested list of chemicals and quantities used by the Dept. for evaluation with applicable codes. LHU has not identified the EOHS (Environmental &amp; Occupational Health &amp; Safety) person to work with the Design Team at this time.</p> <p>7. M. Moresch gave tour of existing chemistry labs, classrooms and support rooms in Ulmer for JCI and HA folks.</p>	
<p>Food Service Dept. Sept. 24, 2009 1:00PM-1:45PM Sullivan Board Rm.</p> <p>1. The need for an East Campus food service center was presented both verbally and through an example plan of a Panerra Bread type food service venue.</p>	

<ol style="list-style-type: none"> <li>2. The ideal East Campus food service complex would entail upward of 3,000 SF and have an exterior connection to outdoor eating amenities.</li> <li>3. While the need for these facilities is justified by the anticipated building populations, the scope of the Science Center building project does not include the undertaking of a food service project of this magnitude.</li> <li>4. It was stated that given a choice between locating this food service venue in either the new Science Building or in what is now referred to as the tutorial area of the former Jr. High School building, the tutorial area is preferred owing to its location relative to the main entrance and the resulting easy connection that exists to the exterior.</li> <li>5. To the extent that the program for the Science Center, which includes the need for student lounge areas, can overlap with some level of a food service program in conjunction with the student lounges, such overlap will be developed as feasible along with the rest of the program priorities.</li> <li>6. The value in the development of some type of area for the purpose of food consumption is recognized since the consumption of food in the labs and classrooms is not desired.</li> <li>7. All of the above should be considered in the design of the Science Center, so as to avoid making the future development of food service amenities more difficult as well as to foster the development of that which is feasible to do.</li> </ol>	
<p>Biology Dept.  Sept. 25, 2009  9:00AM-10:00AM  Ulmer Rm. 321</p> <ol style="list-style-type: none"> <li>1. Department currently has (11) faculty offices and require (3) offices for future. Faculty office size to be 150sf.</li> <li>2. Discussed the biology courses, sizes of classrooms, laboratories, support spaces and number of students- <ul style="list-style-type: none"> <li>(32) Students – Basic Biology <ul style="list-style-type: none"> <li>• Prep Lab/Storage (Can share space with POB and Aux)</li> </ul> </li> <li>(28) Students – Principles of Biology <ul style="list-style-type: none"> <li>• Prep Lab/Storage (Can share space with Basic and Aux)</li> <li>• Currently with 26 students</li> </ul> </li> <li>(28) Students – Auxiliary</li> </ul> </li> </ol>	

- Currently with 26 students
- Prep Lab/Storage (Can share space with POB and Basic)
- (20) Students – Genetics Lab
  - Currently with (16) students
  - Prep Lab/Storage (Can share space with Molecular Biology)
    - Autoclave
    - Ice flaker
- (20) Students – Molecular Biology Lab
  - Currently with (16) students
  - Prep Lab/Storage (Can share space with Genetics)
- (20) Students – Botany/Zoology Lab
  - Currently with (16) students
  - Prep Lab (Current prep lab used as student research)
- (18) Students – Microbiology Lab
  - Currently with (16) students
  - Locate adjacent to Molecular and Genetics lab
  - Prep Lab (Current prep lab used as student research)
    - Space for anaerobic chamber. Room requirement to be evaluated.
- (16) Students – Physiology Lab
  - Animal Room (Approx. 80sf) desired for aquatics & mammals
  - Prep Lab
- (18) Students – Ecology Lab
  - Currently with 16 students
  - Wet & dry museum room
  - Downdraft exhaust at student benches
  - Provide areas for aquariums
  - Prep Lab
- (16) Students – Mycology Lab (Swing Lab)
  - Lab can be used for various lab courses.  
Dept. to discuss the importance of this room.
- (24) Students – Computer Room/Classroom (Can be shared with other Depts.)
  - Require access to GIS computers

3. Additional Dept. Requirements –

- a. Bird Room (Natural History)
  - Museum type cabinets
  - Storage for animal collections
  - Biosafety cabinet
  - Adjacent to Molecular and near sterilizer unit
- b. Field Equipment Room
  - Ground level location preferred with access to parking area and/or loading area for delivery and departure.

- Mud room desired for washing field equipment after use.
  - c. General Storage
    - Poster frames
    - Specimen containers
    - Greenhouse supplies
  - d. Cold Room
    - 50sf desired
    - Storage for vertebrate
  - e. Student Research Lab
  - f. (20) Person- Conference Room (Can be shared with other Depts.)
  - g. Core Equipment Space (Can be inside Molecular or Genetics prep lab)
    - (1) -80 Freezer
    - (1) Centrifuge
    - Speed Vac
  - h. Tissue Culture Room
    - Lab sink
    - (1) Biosafety cabinet
    - (1) Stacked incubators
    - (1) Refrigerator
  - i. (25 ) Person – Seminar/Conference Room desired
  - j. Classrooms
    - (3) 70 Students– Tiered seating
    - (4) 50 Students– Tiered seating
    - (2) 150 Students– Tiered seating
4. Greenhouse and other greenhouse related items were discussed briefly. LHU and Design Team to study and evaluate the feasibility of constructing a new greenhouse.  
Note- Greenhouse needs to be located in the building.
  5. Dept. requested that Molecular be provided with a room approx. 50sf for PCR unit.
  6. (25) Person – Seminar/Lecture Room is desired.
  7. HA/JCI requested list of chemicals and quantities used by the Dept. for evaluation with applicable codes. LHU has not identified the EOHS (Environmental & Occupational Health & Safety) person to work with the Design Team at this time
  8. J. Calabrese and K. Thompson gave tour of existing biology labs, classrooms and storage rooms in Ulmer for JCI and HA folks.

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Geology Dept.  
Sept. 25, 2009  
11:15PM-12:00PM  
Ulmer Rm. 106

1. Department currently has (3) faculty offices and require (1) office for future. Faculty office size to be 150sf.
2. Discussed the geology courses, sizes of classrooms, laboratories, support spaces and number of students-

(30) Students – General Geology Lab

- Storage Room
- Display Tables

(30) Students – Upper Div. Majors Lab

- Storage Room (Shared with Gen. Geology)
- Display Tables
- Prep Lab/Storage
  - Rock cutting/rock prep (Dirty lab)
  - Separation of dirty and clean equipment desired.
- Rock Mineral Storage (Can be inside Gen. Geology Storage)
- Map Storage and Drafting Room

(16) Students – Mineralogy/Petrology Lab

- Adjustable height tables required

(16) Students – Paleontology Lab

- Map Storage

(16) Student – Water Analysis Lab/Research Lab

- Set bench at sitting height
- Sinks at lab benches
- D.I. water
- Fume hood
- Provide maximum storage

(24) Students – GIS Computer Lab

- Plotter and digitizing equipment in separate room off computer room
- Massive rock collection storage

3. Geo-Physics Equipment Room requires separation of clean equipment from soiled equipment.  
Mud room desired for washing field equipment after use.
  4. X-Ray Equipment room needs to be in a separate room. Room to accommodate 4 to 5 people. Room size of 110sf is acceptable. Wood tables required due to the magnetic characteristic of the unit.
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<ol style="list-style-type: none"> <li>5. HA/JCI requested list of chemicals and quantities from the Dept. for evaluation with applicable codes. LHU has not identified the EOHS (Environmental &amp; Occupational Health &amp; Safety) person to work with the Design Team at this time.</li> <li>6. M. Khalequezaman, T. Wynn and L. Dickson gave tour of existing geology labs, classrooms and storage rooms in Ulmer for JCI and HA folks.</li> </ol>	
<p>Post Meeting Notes</p> <ol style="list-style-type: none"> <li>1. LHU provided the Science Dept. secretaries' requests for space in the new science center including list of requirements (See attached list)</li> <li>2. Next programming meetings scheduled for Oct. 15 &amp; Oct. 16. Time and place- TBD. Note- Room with projector &amp; screen required.</li> </ol>	

End of Meeting Notes.