Meeting Synopsis:

1) Call to Order
2) Approval of the Agenda
3) Approval of the Minutes and Notes from November 13th, 2014, and December 11th, 2015
4) Chair remarks
5) Learning Spaces and Classrooms, Roberta Hopkins (UW-IT)
6) Good of the Order
7) Adjourn

1) Call to Order

The meeting was called to order by Christie at 10:00 a.m.

2) Approval of Agenda

The agenda was approved as written.

3) Approval of Minutes and Notes from November 13th, 2014, and December 11th, 2014.

The minutes and notes from November 13th, 2014, and December 11th, 2014 were approved as written.

4) Chair remarks

Chair Christie noted members Carrie Stuart-Dossick and Sarah Gates have resigned from the council due to other obligations. He explained that, for the rest of the year, he anticipated fewer FCUFS special meetings.

Christie explained that the Architectural Commission had recently reviewed the last warehouse conversion at the University of Washington Tacoma campus. He noted some of the details of this conversion; the external appearance will remain roughly the same, and the inside of the building has been altered to bring light from a skylight throughout the space; an interactive learning classroom is conceptually part of the design. Comments were made that the Tacoma campus is well designed, and has done a lot for the city of Tacoma as well as the neighborhood it resides in.

Christie further explained the University Hospital main entrance is being rebuilt; the lobby will have garden views, among other changes. Christie reported that the Architectural Commission has noted traffic routing is not well solved as of yet and remains a problem.

The Architectural Commission also selected an architect for the Computer Science and Engineering (CSE) building. The selected firm is presently confidential, though Christie noted he is aware the computer science building committee is happy with the decision.
It was noted Richard Chapman, who has been largely responsible for a great deal of construction on the UW campus for many years, will be retiring the following week after this council meeting. Christie noted he would draft a statement of appreciation on behalf of the council.

Charles Kennedy (presidential designee) noted he has been asked to chair the committee responsible for the search for the new head of the Capital Developmental Organization. He explained to the council there will be an interim, before a new permanent director is found.

5) Learning Spaces and Classrooms, Roberta Hopkins, UW-IT [Exhibit 1]

Roberta Hopkins, Director of Classroom Technology and Events, was present to give some updates on the state of general use classrooms as well as other initiatives being undertaken by her department.

*Active Learning Classrooms in Odegaard Library / Update*

Hopkins explained the Odegaard Library building includes two “active learning classrooms” that have been in use for over two years. A first year report showed that the outcomes of the rooms’ implementation were very positive. Hopkins noted she believes that the “active learning style classroom” is the classroom of the future. She continued UW will likely be adding more of these classrooms in the future, though with less technological advancements and more moveable furniture to keep costs low but efficiently encourage collaborative learning. A council member asked how well utilized the rooms are; Hopkins replied they see 25-30 hours of usage per week. She elaborated that after classes are finished daily, the walls are opened up and the rooms join the rest of the library, and in this time students and others use the space for group study and collaboration. The rooms were reported to be well filled during these hours.

Hopkins added that her department often hears that faculty would like a single, large, projection screen and related equipment instead of the multiple screens in the existing rooms. She noted they could not fit this aspect into the rooms because of sizing and limitations in the space. A question came up of why faculty want a central projection capability. It was explained faculty often like to have some portion of the class where all focus and attention is on them, wherein they can project an image for students to see and to use that as a focal point for the class or for lectures. Continued discussion ensued on the layout of the classrooms. Monitor screens are used at large tables, where devices can be connected (i.e. a laptop) and students can engage their material in groups; the most screens in one room is nine. Moreover, if the teaching professor finds that one table group is looking at something of benefit to the whole class, they can “push” that image to all other screens in the room. This factor provides for a truly interactive working space, with a lessened need for one single projection element. Hopkins noted these rooms require a lot of adaptors to make sure various devices can be connected. The library can provide these, in some cases. PC, Mac, DVI and VGA connectors are provided within the rooms, though Mac computers often require varying adaptors for connectivity, which sometimes cannot be accounted for.

*Costs*

A question of costs arose. Hopkins explained these two rooms cost $400,000 to renovate due to their technological additions. She noted the cost was increased because of use of outside (not in-house) contractors, designers, and the like. She noted the costs can be cut by approximately 60% if renovations are done in-house in the future.

*Classroom Renovations*
Hopkins noted there are plans to remove projector booths in assorted lecturing rooms around campus, freeing up more seating space, this practice can yield up to 30 new seats or more. She noted upgrades to technology are on a separate timeline than upgrades to lighting, acoustics, and larger construction-based remodels, with the latter requiring longer time durations to schedule and complete.

Hopkins noted they are hoping to get $12,000,000 for major classroom renovations per an administrative request. She explained the lecture room Thompson 101 has gone from 100 seats to 130 seats when the projector booth was removed - a ceiling-mounted projector was added to account for the design change. She further explained renovations to an older room, like Bagley 131, can be done to make seating more flexible and fluid so the seats can move. She explained these sort of renovations are something they hope to achieve in big and older lecture rooms across campus.

“Update to the Faculty Council on University Facilities” [Exhibit 1]

Hopkins then gave an update to the council concerning recommendations made by an outside consulting group titled “Learning Spaces Assessment” using a PowerPoint presentation. She also detailed future plans for renovations on campus.

Hopkins mentioned the report was given in June, and compiled by outside consultants concerning numerous recommendations for the bettering of the UW in respect to scheduling and learning spaces. These recommendations were:

- Establish a Classroom Governance Committee
- Examine and adjust current scheduling policies/practices
- Block scheduling/ Pass Time
- Schedule distribution/increase off-peak use
- Expand day schedule to 50 hours/week (8am to 6pm)
- Right-size classrooms
- Establish predictable funding for technology and renovation upgrades
- Establish technology replacement cycle
- Establish technology standardization
- Expand Faculty support for teaching (CTL)
- Renovate/Expand informal learning spaces
- Review existing inventory of proprietary classrooms to fill gaps in general assignment pool
- Explore moving to Semester system

The full report from the outside consultants is over 150 pages and it was noted the report is public information and thus publically available. It was explained the Office of Planning and Budgeting website has a link to this report. The council noted they would like this report linked to them for further review.

Continued Discussion on Consultant Group Recommendations

A council member noted the UW is undersized for classes with capacities of 1-20 seats, but oversized on classrooms with 21-30 seats. It was noted to maximize use of the rooms, there is a sizing slot between very large classes and very small classes that may be ideal for an array of courses. It was explained the rooms with capacities of 61-70 seats are most lacking at the UW. Hopkins explained that the outside consultants put emphasis on the fact that if scheduling was made more efficient at the UW, fewer rooms could be utilized to meet all demands.
In response to scheduling recommendations - a point came up about how teaching seminars cannot be undertaken in the morning hours for reason of low student turnout. It was noted scheduling changes are more difficult to implement because of issues like this one. Discussion ensued on the difficulties of scheduling classes and utilizing space ideally at the UW. It was decided there are many facets and this is a multidimensional problem. A comment was made that creativity and metrics have improved in recent years, and the university is currently in a good place to address these issues and find solutions.

Hopkins also made some comments on the recommendations from the outside consulting group. She noted funding technology and classroom improvements are a big prerogative for her department. She believes the scheduling questions are hard ones to answer or to provide solutions for based on the nature of the issue. She noted some departments only schedule classes for specific slots through personal preference. She continued that mid-afternoon scheduling is ideal for most, yet believes several departments could change their scheduling to be more in line with UW community scheduling goals.

Hopkins noted there is only one room to fit very large classes on the entire UW campus: Kane 130. She noted the UW is facing the issue of a department like history having trouble scheduling this room for its own purposes. The room has a capacity of 720.

Hopkins noted her department is attempting to make rooms more uniform in regards to the technological aspects they support. For example, they are trying to improve connectivity for laptops with a wider array of connectors. She noted renovations include plans for room control through instructor podiums, as well as added document cameras on podiums for projection of hard copy materials.

Future Plans

Hopkins outlined her department’s plans for the future. They include:

- Goal is to complete 80 classroom renovations each biennium
  - on pace to complete 84 in 2013-15
- Manage contractors
- Schedule learning spaces
- Implement 8-year technology refresh

Hopkins noted it will be an inconvenience to some during room renovations but it is necessary. A point came up concerning electrical power needs in each updated room. Hopkins noted that is a good point, but existing building electrical systems are bottlenecks: in order to add one outlet, one other needs to be deactivated within the space. It was noted the Campus Planning Office will be useful in these renovations. Hopkins noted her department is communicating often with this office.

Technology Feature Sets for Future Renovations

Hopkins noted the Technology Feature sets to be included in varying rooms, they are:

**Wall Display**
- Wall mounted LCD/Plasma display about 65” in size.
- 15’ HDMI and VGA cables and optional Air Media for wireless projection. Control is via IR remote tethered to wall

**Digital Media Classroom**
- Podium with 7” touch screen, HDMI and VGA laptop cables, dedicated document camera, and Air Media for wireless projection
- Wall mounted speakers
- Selected rooms have desktop computers, integrated lighting and screen controls, cameras with AV Bridge and microphones

**Digital Media Classroom (No Podium)**
- Wall mounted 7” touch screen, 15’ HDMI and VGA laptop cables and Air Media for wireless projection
- Wall mounted speakers
- Selected rooms have integrated lighting and screen controls and microphones

**Premium Digital Media Classroom**
- Podium with 15” touch screen and integrated monitor, HDMI and VGA laptop cables, dedicated document camera and Air Media for wireless projection.
- Split screen / display support
- Wall mounted speakers
- Desktop computer, integrated lighting and screen controls, cameras with AV Bridge and microphones

Hopkins then showed a map highlighting rooms which include plans to be renovated in the future (Exhibit 1, Slide 11). The map notes all classrooms in red are to be completed - all in black will be finished by September 2015. She explained there will be a six-year refresh cycle for these renovations, and talks are beginning concerning physical plan improvements and not just technological upgrades. A question was asked concerning how the department is accounting for technological changes and their effects on teaching faculty in these rooms. Hopkins explained that emails go out to faculty who teach in these rooms noting what changes have been made. Moreover, instructions are posted in the classroom detailing most technical upgrades and their functioning.

Hopkins noted carrying out renovations “in-house” is a great way to move forward, because problems can be fixed in house much quicker than if an outside contractor has to come back the UW and complete them - she noted outside contractors can take years to do this.

*Slide 15 [Exhibit 1] shows a map detailing Planned 2015-2017 Renovation Projects. Some of these include but are not limited to: Denny Hall, Bagley Hall, Electrical Engineering Building, Nano ES Building, and Loew Hall.

Hopkins explained that her department is focusing on finding what revisions can be made that are more flexible, less technology focused, and that can work for a variety of departments. It was noted new rooms will be important for existing students as well as enrollment increases.

6) **Good of the Order**

Hopkins explained she will return during the next regular meeting, as a group is interested in classroom security and what can be done to help the issue.

7) **Adjourn**

Chair Christie adjourned the meeting at 11:30 a.m.

Minutes by Joey Burgess, jmbg@uw.edu, council support analyst

**Present:**

**Faculty:** Rich Christie (chair), Giovanni Migliaccio, Bill Rorabaugh, Christopher Ozubko

**Ex-Officio representatives:** Steve Goldblatt, Chris Byrne
Presidential Designee: Charles Kennedy

Absent: Faculty: Laura Little, Murray Maitland, Ann Mescher, Gundula Proksch
Ex-Officio representatives: John Carroll, Adam Kahn, JoAnne Taricani

Exhibits

Exhibit 1 - Update to the Faculty Council on University Facilities: UW IT-Academic Services
Update to the Faculty Council on University Facilities
UW-IT Academic Services
(Classroom Technology & Events)

January, 2015
Learning Space Assessment Report Recommendations

June, 2014

- Establish a Classroom Governance Committee
- Examine and adjust current scheduling policies/practices
  - Block scheduling/Pass Time
  - Schedule distribution/increase off-peak use
  - Expand day schedule to 50 hours/week (8am to 6pm)
- Right-size classrooms
- Establish predictable funding for technology and renovation upgrades
  - Establish technology replacement cycle
  - Establish technology standardization
- Expand Faculty support for teaching (CTL)
- Renovate/Expand informal learning spaces
- Review existing inventory of proprietary classrooms to fill gaps in general assignment pool
- Explore moving to Semester system
<table>
<thead>
<tr>
<th>Classroom Seats</th>
<th>General Use Classrooms, AQ 2014</th>
<th>Calculated Need</th>
</tr>
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<tbody>
<tr>
<td>1 - 20</td>
<td>27</td>
<td>58</td>
</tr>
<tr>
<td>21 - 30</td>
<td>93</td>
<td>61</td>
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<td>31 - 40</td>
<td>55</td>
<td>45</td>
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<td>41 - 50</td>
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<td>16</td>
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<tr>
<td>51 - 60</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>61 - 70</td>
<td>7</td>
<td>26</td>
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<td>71 - 80</td>
<td>11</td>
<td>4</td>
</tr>
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<td>81 - 90</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>91 - 100</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>101 - 125</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>125 - 150</td>
<td>5</td>
<td>3</td>
</tr>
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<td>151 - 175</td>
<td>3</td>
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<td>175 - 200</td>
<td>4</td>
<td>4</td>
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<td>201 - 250</td>
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<td></td>
<td>303</td>
<td>260</td>
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</table>

Comparison of Autumn Quarter 2014 General Use Classrooms
Actual to Calculated Need
(June 2014 Learning Space Assessment Study Report)
## Count of General Use Classrooms by Capacity

### Autumn Quarter 2008 to 2014

<table>
<thead>
<tr>
<th>Classroom Seating Capacity</th>
<th>Autumn Quarter</th>
<th>Net Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>10 to 25 Seats</td>
<td>59</td>
<td>69</td>
</tr>
<tr>
<td>26 to 35 Seats</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td>36 to 50 Seats</td>
<td>76</td>
<td>89</td>
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<tr>
<td>51 to 75 Seats</td>
<td>24</td>
<td>22</td>
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<tr>
<td>76 to 150 Seats</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>151 to 250 Seats</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>251 or More Seats</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>299</td>
<td>324</td>
</tr>
</tbody>
</table>
Distribution of Course Sections by Ending Time

Autumn Quarter 2010 to 2014

Average Daily Count of Course Sections

Ending Time of Course Meetings

AQ 14
AQ 13
AQ 12
AQ 11
AQ 10
### General Use Classrooms: 251 or More Seats

* Autumn Quarter 2012, 2013 and 2014 *

<table>
<thead>
<tr>
<th>Building</th>
<th>Room Number</th>
<th>Room Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>120</td>
<td>265</td>
</tr>
<tr>
<td>Bagley*</td>
<td>131</td>
<td>300</td>
</tr>
<tr>
<td>Architecture</td>
<td>147</td>
<td>305</td>
</tr>
<tr>
<td>Guggenheim</td>
<td>220</td>
<td>345</td>
</tr>
<tr>
<td>Kane</td>
<td>120</td>
<td>440</td>
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<tr>
<td>Kane</td>
<td>130</td>
<td>720</td>
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</table>

#### Weekly Hours of Scheduled Use

<table>
<thead>
<tr>
<th>Building</th>
<th>AQ 12</th>
<th>AQ 13</th>
<th>AQ 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>30.0</td>
<td>28.0</td>
<td>32.0</td>
</tr>
<tr>
<td>Bagley*</td>
<td>30.5</td>
<td>34.5</td>
<td>30.0</td>
</tr>
<tr>
<td>Architecture</td>
<td>34.5</td>
<td>36.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Guggenheim</td>
<td>42.0</td>
<td>39.0</td>
<td>36.0</td>
</tr>
<tr>
<td>Kane</td>
<td>44.5</td>
<td>36.0</td>
<td>37.5</td>
</tr>
<tr>
<td>Kane</td>
<td>46.5</td>
<td>43.0</td>
<td>37.0</td>
</tr>
</tbody>
</table>

#### Fullness

<table>
<thead>
<tr>
<th>Building</th>
<th>AQ 12</th>
<th>AQ 13</th>
<th>AQ 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>73.5%</td>
<td>58.8%</td>
<td>68.6%</td>
</tr>
<tr>
<td>Bagley*</td>
<td>65.2%</td>
<td>75.4%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Architecture</td>
<td>82.4%</td>
<td>57.9%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Guggenheim</td>
<td>72.4%</td>
<td>89.0%</td>
<td>78.1%</td>
</tr>
<tr>
<td>Kane</td>
<td>77.8%</td>
<td>88.7%</td>
<td>87.6%</td>
</tr>
<tr>
<td>Kane</td>
<td>64.2%</td>
<td>76.7%</td>
<td>76.3%</td>
</tr>
</tbody>
</table>

* Added 10 Seats
Current Classrooms

Design, programming and integration done in-house

Benefits
- Digital signal support
- Uniform UI
- Similar feature set
- Consistent products
- Metric collection
- Remote support
Classrooms Upgrade Plan

Goal is to complete 80 classrooms each biennium

- on pace to complete 84 in 2013-15

Manage contractors

Schedule learning spaces

Implement 8-year technology refresh
Technology Feature Sets

- **Wall Display**
  - Wall mounted LCD/Plasma display about 65” in size.
  - 15’ HDMI and VGA cables and optional Air Media for wireless projection. Control is via IR remote tethered to wall

- **Digital Media Classroom**
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  - Split screen / display support
  - Wall mounted speakers
  - Desktop computer, integrated lighting and screen controls, cameras with AV Bridge and microphones
Per Upgrade Budget Estimate (Technology Only)

- **Small Classroom**
  - AV System: $1,000-$3,000
  - Projector: $3,500
  - Price Range: $4,500 to $7,500

- **Small to Medium Digital Media Classroom**
  - AV System: $8,000-$10,000
  - Projector: $3,500
  - Optional Podium: $2,500
  - Price Range: $14,000 to $16,000

- **Medium Digital Media Classroom**
  - AV System: $15,000-$25,000
  - Projector: $3,500-$13,000
  - Optional Podium: $2,500
  - Price Range: $21,000 to $40,500

- **Lecture Hall**
  - AV System: $45,000-$60,000
  - Projector: $13,000-$30,000
  - Split Screen: $12,000
  - Optional Podium: $2,500
  - Price Range: $60,500 to $104,500

- **Premium Lecture Hall**
  - AV System: $55,000-$75,000
  - Projector: $13,000-$30,000
  - Optional Podium: $2,500
  - Price Range: $70,500 to $107,500
Capital Projects & Client Spaces

Worked with CPO, to compete full building renovations

Client spaces benefit from uniform design and on-site support

Revenue generated is invested in UW classrooms
Denny Hall
Closed for major renovation
June 2015;
Scheduled reopening Winter Quarter 2017.
The renovated building will have 11 general use classrooms, one will be an active learning classroom.

Nano E5 Building
Schedule and design are in draft.
Plan has two general use classrooms active learning classrooms that support science and engineering type courses.
Classroom sizes are tentatively listed as 120 and 60 seats.

Bagley Hall
Funding requested via Minor Repairs Capital Budget.
Goal is to upgrade all furniture, room finishes, lighting and AV (as needed).
Special consideration will be given to making the building lecture halls more 'active learning' friendly.

Lower Hall
Funding requested via Minor Repairs Capital Budget.
Goal is to upgrade all furniture.
Additional upgrades will tentatively be included for three classrooms used to support UWEEO distance education/Engineering joint courses (if funding is available).

Electrical Engineering Building
Funding requested via Minor Repairs Capital Budget.
Goal is to upgrade all furniture, room finishes, lighting and AV (as needed).
University of Washington
Principles for Designing Teaching and Learning Spaces
January, 2015

The University of Washington Learning Space Assessment study report to the Office of the Provost (published June 2014) facilitated the development of strategies and standards for UW instructional spaces to support student learning outcomes. Current research identifies best practices for undergraduate education as those having the greatest impact on student engagement. The annual National Survey for Student Engagement organizes these practices into several major categories, and the University of Washington uses these categories to shape its design principles for teaching and learning spaces. The University of Washington strives to design all teaching and learning spaces to support instructors in their efforts to use pedagogical best practices and to enhance student engagement and learning. The principles outlined here are intended to be translated into design goals that can be incorporated in UW construction and renovation projects.

Academic Challenge
UW learning spaces will support students who actively engage with course content, through analysis, judgment, synthesis or applying content in new ways. The university’s learning spaces will support multiple modes of teaching and learning.

Learning with Peers
UW learning spaces will facilitate student-to-student interaction and group collaboration to support teams and peer-to-peer problem solving and mastering of materials.

Faculty-Student Interaction
UW learning spaces will facilitate interaction and communication between students and faculty.

Learning Beyond the Classroom
UW learning spaces exist within a larger context. The UW campus is a continual learning space where students and their mentors meet and learn. Scholarship and discovery are encouraged and enhanced by many different facility types beyond formal instruction spaces. Informal learning spaces will be designed consistently with overall university culture and priorities.

High-Quality Facilities
UW learning spaces will incorporate high quality materials and finishes that are functional, durable, ergonomic and welcoming. Teaching technologies will be refreshed on an on-going cycle and maintained and serviced for long-lasting appearance and use.
<table>
<thead>
<tr>
<th>Category</th>
<th>General</th>
<th>Furnishings</th>
<th>Equipment</th>
<th>Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Ease of building &amp; floor access</td>
<td>Flexible/ergonomic and comfortable</td>
<td>Common technology feature set for room type</td>
<td>Lighting</td>
</tr>
<tr>
<td></td>
<td>Ease of room ingress and egress</td>
<td>Appropriate layout for room type</td>
<td>Common control systems, &quot;look &amp; feel&quot;</td>
<td>M, P, E</td>
</tr>
<tr>
<td></td>
<td>Ease of movement within the space</td>
<td>Unobstructed sightlines</td>
<td>User-friendly/accessible display &amp; playback systems</td>
<td>Daylight</td>
</tr>
<tr>
<td></td>
<td>Gathering &amp; waiting space near room</td>
<td>Display/creative opportunities</td>
<td>Expandable infrastructure/resources backbone</td>
<td>Acoustics</td>
</tr>
<tr>
<td></td>
<td>Access to resources (writing, research, tutorial, etc.)</td>
<td>Appropriate seating capacity for enrollment</td>
<td>Ample writing and display boards/walls</td>
<td>Acoustics</td>
</tr>
<tr>
<td></td>
<td>Informal conversation and learning space</td>
<td>Able to support different learning modes</td>
<td>Appropriate voice amplification</td>
<td>Mitigate external and interior noise</td>
</tr>
<tr>
<td></td>
<td>Clear UW Husky &quot;brand&quot;</td>
<td>Resting/display/teaching specific</td>
<td>Program audio &amp; video playback</td>
<td>Support multiple simultaneous discussions</td>
</tr>
<tr>
<td></td>
<td>&quot;Green&quot;, environmentally sustainable</td>
<td>Support Collaboration</td>
<td>Natural light &amp; connection to exterior views</td>
<td>Enhance understanding of student voices</td>
</tr>
<tr>
<td></td>
<td>Universal design applications</td>
<td>Enhance face-to-face communications</td>
<td>Support multiple simultaneous discussions</td>
<td>Appropriate ceiling and wall treatments</td>
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<td></td>
<td>Application of appropriate safety procedures</td>
<td>Ample space for notes and lecture tools</td>
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<td>Appropriate ambient &amp; task lighting</td>
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<td>Appropriate air quantity &amp; quality</td>
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<td>Natural light &amp; connection to exterior views</td>
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<td>Appropriate ceiling and wall treatments</td>
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