WSCH

Do you know:

... what WSCH stands for?
“WSCH” stands for “weighted student credit hours.” The WSCH for a course is “weighted” by multiplying the credit hours generated in that course by a weight based on the Ohio Board of Regents subsidy model.

... the purpose of WSCH?
One may use WSCH to help assess and determine teaching loads in an equitable manner across courses, although they may differ in terms of such factors as enrollments, course credit, and academic level. In a nutshell, in the WSCH model all courses are categorized as to “level,” “higher” courses getting higher weights than “lower” courses. A key factor in determining teaching load is the number of enrollments. Higher level courses require fewer enrollments to achieve the same teaching load as lower level classes with more enrollments. Therefore, to the extent that teaching load is a function of enrollments (along with course level and course credit), teaching load can be assessed and adjusted using the WSCH model.

... what department and college data elements are found in the reports?

Data elements found in Departmental reports
- For each course is listed the instructor name, course catalog number/call number, enrollments, credit hours generated, FTE (full-time equivalent) enrollments, course weight, and WSCH. Totals are broken down by undergraduate and graduate level courses. These data elements are either self-evident or defined in later sections.
- Data for Tier 3 courses—processed separately from non-Tier 3 courses but are included in grand totals.
- “Average Credit Hour Weight”—This is the average weight per credit hour used in calculating WSCH (total WSCH divided by total credit hours).
- “Avg Course Wt”—This is the average weight per course used in calculating WSCH (sum of all weights used divided by the number of weights used, one per course).
- “MAJORS”—Under this column heading are enrollments, credit hours, and WSCH generated for the department by students with declared majors within the department.
- “NON-COL”—Under this column heading are enrollments, credit hours, and WSCH generated for the department by students with majors outside of the college.
- “PERCENT OF TOTAL CREDITS”—The 14 weights used to calculate WSCH are grouped into five categories of courses: “General Studies,” “Technical,” Baccalaureate,” Masters,” and “Doctoral” (see Table below). The “Percent of Total Credits” is the percentage of total credit hours accounted for by each category.

Data elements found in College-wide Summaries
- Enrollments and credit hours for each 4-digit major in the college at each level of the model.
- “COL-MAJ”—Under this column heading are enrollments, credit hours, and WSCH generated for the college by students whose majors are within the college.
“NON-MAJ”—Under this column heading are enrollments, credit hours, and WSCH generated for the college by students whose majors are outside of the college.

“PERCENT OF TOTAL CREDITS”—This element was defined under the departmental section above.

Do you know:

… what the numeric weights are and how they were derived?

The table below is intended to help answer this question. It lists 14 categories from the Ohio Board of Regents subsidy model together with their numeric weights and descriptive labels. The weights were developed at Ohio University, based on a Board of Regents survey which reported statewide average student-to-faculty ratios for these 14 course levels in Ohio.

At Ohio University “General Studies I” is assigned a weight of 1.0 because it is the lowest course level (Level 1) and is used as the standard for calculating the remaining 13 weights. To find the weight for Level 2 (“General Studies II”) divide the number of students per faculty for Level 1 (36) by the number for Level 2 (23), yielding a Level 2 weight of 1.57. Likewise, the remaining weights are found by dividing 36 (Level 1) by the student-to-faculty ratio for each level.

… how to calculate the WSCH for a course or level?

To answer this question, first find the credit hours for a particular course or level and then multiply by the weight for that course level. As shown in the table below, for Level 2, multiple 23 by 5 to get 115 credit hours. Then, multiply 115 by the weight of 1.57 to yield 180 WSCH.

… how equivalent teaching loads can be determined using WSCH?

In the table below, the WSCH for each level is 180. This is to illustrate what the equivalent teaching loads (student-to-faculty ratios) would be for 5-hour courses across the 14 categories. Regardless of how courses may differ in credit hours or level, however, any two courses’ WSCH can be compared if you know their probably class size, level (weight), and credit hour they are worth. The weight for any course is listed in its department’s WSCH report for the desired quarter and year.

If you are responsible for the upcoming quarter’s teaching schedules of two faculty members, how might you come up with equivalent teaching loads for them? By trying combinations of these factors, you may be able to come up with at least roughly equivalent total WSCH for each faculty member. By the same token, you may devise a teaching load that is a fraction of the usual amount.

… how graduate courses are coded?

Graduate courses may appear different from how they were listed in the schedule. The Ohio Board of Regents (OBOR) funds graduate courses according to the level (master’s or doctoral) of the students. In the process of reporting to OBOR, graduate courses are converted to correspond to the level of the student. Prior to winter quarter 1998, graduate courses in departments that
offer doctoral degrees were recoded. For example, if a doctoral student were enrolled in CHEM 553, this master’s level course would be converted to a doctoral level, and it would be recoded CHEM P53. The “P” indicates that the course was converted to a doctoral level. If a master’s level student were enrolled in CHEM 730 (a doctoral course), it would be converted to CHEM M30—a master’s level course.

Because of new OBOR reporting requirements in the quarterly Higher Education Information (HEI) system which began winter 1998, a change was made in this method of reporting graduate courses. Beginning winter 1998, all graduate courses (except master’s thesis courses) in programs that offer a doctoral degree were converted to doctoral level as their default level. For example, the course CHEM 553 was assigned a default doctoral level. Doctoral students enrolled in this course would be listed at the appropriate doctoral level. If any master’s level students were enrolled in CHEM 553, the course would be converted to CHEM M53. No graduate courses are converted to “P” because they are all doctoral level by default. OBOR’s practice is to downgrade the subsidy from doctoral to master’s; they never upgrade from master’s to doctoral. This conversion method does not reflect changes in funding or the weight of the course. It only reflects changes in the notation as required by HEI.

Conversions in reporting reflect how graduate courses are funded. Converted “M” and “P” courses appear only in departments that offer doctoral programs. These courses appear along with the regularly listed courses. They should be treated as one section with two levels of students enrolled. They can be identified because they have the same call number.
Ohio University Weighted Student Credit Hour (WSCH) Model
Example Using Five-Credit-Hour Courses

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Students per Faculty</th>
<th>Credit Hours per Faculty</th>
<th>Weight</th>
<th>WSCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Studies I</td>
<td>36</td>
<td>1.00</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>General Studies II</td>
<td>23</td>
<td>1.57</td>
<td>115</td>
</tr>
<tr>
<td>3</td>
<td>General Studies III</td>
<td>24</td>
<td>1.50</td>
<td>120</td>
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<tr>
<td>4</td>
<td>Technical I</td>
<td>15</td>
<td>2.40</td>
<td>75</td>
</tr>
<tr>
<td>5</td>
<td>Technical II</td>
<td>12</td>
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<tr>
<td>6</td>
<td>Technical III</td>
<td>10</td>
<td>3.60</td>
<td>50</td>
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<td>Baccalaureate I</td>
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<td>1.80</td>
<td>100</td>
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<tr>
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<tr>
<td>14</td>
<td>Doctoral II</td>
<td>5</td>
<td>7.20</td>
<td>25</td>
</tr>
</tbody>
</table>

Do you know:

… the weights assigned to your department’s courses?

< Click here for an annotated departmental report >

… the WSCH for Tier 3 courses in your department?

< Click here for an annotated department report listing Tier 3 courses >

… the WSCH from your department’s own student majors?

< Click here for an annotated department report. Note the “MAJORS” heading. >

… how to find the WSCH for your department’s 4-digit majors?

< Click here for an annotated college summary listing 4-digit majors >

… your college’s WSCH from majors outside the college?

< Click here for an annotated college summary. Note the “NON-MAJ” heading. >

< Click here for an annotated college summary. Note college headings. >
Do you know what you can use WSCH data for?

Suggestions:
- Assessing and planning teaching loads of your faculty. One factor not considered in the model is preparation time for new courses.
- Assessing credit generated by your department.
- Planning, assessment, and reporting with respect to curricula and academic programs. Where are the heaviest/lightest loads and how do they vary over time?
- Information for reports, grants, research, and other documents.