University of Wisconsin System Administration
Instructional Analysis Information System (IAIS)

Cost Per Credit Reports

By UWSA Office of Information Services and Office of Policy Analysis & Research
Contents

IAIS – Cost per Credit Report

Overview .................................................................................................................................... 1
General Rules and Guidelines ................................................................................................. 2
Instructors ............................................................................................................................... 2
Sections .................................................................................................................................. 2
Students ................................................................................................................................. 2
Budget .................................................................................................................................. 2
Expenditures .......................................................................................................................... 2
Summarizing Data ............................................................................................................... 1
Levels of Summarization ...................................................................................................... 2
Input Parameters Used By The Report .................................................................................. 1
Report Levels ...................................................................................................................... 1
Report Layout ...................................................................................................................... 1
Report Definitions ............................................................................................................... 1
1. Budget - Group ........................................................................................................ 1
2. Cluster Summary ........................................................................................................... 1
3. Cost per Credit - row ............................................................................................... 2
4. Cost per FTE Student - row....................................................................................... 2
5. Department .................................................................................................................. 2
6. Department Name ...................................................................................................... 2
7. Department Summary ............................................................................................... 2
8. Discipline Area .......................................................................................................... 2
9. Division ......................................................................................................................... 3
10. Division Name .......................................................................................................... 3
11. Division Summary ..................................................................................................... 3
12. Expenditures - Group ............................................................................................. 3
13. FTE Staff - Group ..................................................................................................... 4
14. FTE Student - row ................................................................................................... 5
15. Student Credits - row ............................................................................................. 5
16. Student Levels .......................................................................................................... 5
17. Student : Faculty FTE Ratio - group ....................................................................... 6
18. Sub Department ........................................................................................................ 7
19. Sub-Department Name ............................................................................................ 7
20. Sub-Department Summary ....................................................................................... 7
21. Term ............................................................................................................................ 7
22. Unit .............................................................................................................................. 8
23. Unit Abbreviation ..................................................................................................... 8
24. Unit Summary .......................................................................................................... 8
25. Year ............................................................................................................................. 8
How To .................................................................................................................................... 8
How to derive an Instructor Type from a Title Code ................................................... 8
How to calculate an Instructor Type's Total FTE ......................................................... 9
How to calculate Student Credits by Student Level ................................................... 9
Glossary of Terms 25

Index 33
IAIS – Cost per Credit Report

Overview

There are two basic versions of the Cost per Credit (CPC) Reports – The Cost per Credit by Budget and the Cost per Credit by Expenditures. Both reports can be produced either by UDD or by discipline areas. However, the CPC by discipline areas reports are only designed for the unit and cluster level. The CPC by UDD reports also include a subset of reports which exclude the prorated dollars from the non-teaching departments to the credit-producing departments. These reports are labeled “Department Budget or Expenditure Only”. The processing done on the two types of reports is identical, so they are included in the same help file. The difference between the two types of reports is the file used to obtain the dollar amounts. The CPC – Budget uses the Redbook Budget file to obtain the Instructional Salary, Classified Salary, Supplies/Expenses, and Capital amounts. The CPC – Expenditures uses the Financial Management Reports (FMR) Expenditures file (fiscal year end totals) to obtain the Instructional Salary, Classified Salary, Supplies/Expenses, and Capital amounts.

The Cost per Credit Report lists the total amount budgeted or used for Instructional Salary, Classified Salary, Supplies/Expenses, and Capital for each credit producing department. It also lists the number of official credits, cost per credit, student FTE, cost per student FTE, instructional staff FTE, and student FTE to instructional staff FTE ratios. These statistical categories are further broken down by student level. The data is summarized by UDD, (Unit, Division, and department), by Cluster, or by Discipline Area. This budget report is normally created for the fall term of the current year. The expenditure report must wait until after the Fiscal Year End to be run, therefore it is run for the fall term of the previous year.
General Rules and Guidelines

Instructors

Instructors used for this report are unclassified employees who are funded by state instructional funds. An attempt is made to match the student and curricular information of an instructor on the Central Data Request (CDR) with the unclassified appointment data of the October Payroll on the Human Resource database (HRIS).

Sections

A section is used for this report if at least one student is enrolled in the section and the section is not:

1. A January Practica section
2. A Study Abroad section
3. A UW Extension Credit Program section
4. A Cooperative Advanced Placement Program section
5. A Remedial section
6. An Unidentified section
7. A Dummy section

If a section is cross-listed to an enrollment carrying section, the students in the cross-listed section are added to the students in the enrollment carrying section for counting enrollment, student official credits, and student contact periods. The totals are considered one section and reported under the enrollment carrying section.

Students

Students included in this report are students who are enrolled in the University of Wisconsin and who earned at least one official credit.

Budget

The Redbook Budget file is used to obtain the Instructional Salary, Classified Salary, Supplies/Expenses, and Capital amounts for the budget reports. Fringe Benefits are not included in the salaries or expenses. The amounts used must be funded with a state instructional fund in Activity 2.

Expenditures

The Expenditures file is used to obtain the Instructional Salary, Classified Salary, Supplies/Expenses, and Capital amounts for the expenditure reports. The amounts used must be funded with a state instructional fund in Activity 2.
### Summarizing Data

The following diagram is a high level overview of how the curricular, student, budget, and Human Resource data are summarized to create the Cost per Credit Report.
Levels of Summarization

Cost per Credit Data Views

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highly summarized for Cost Per Credit Reports</td>
</tr>
<tr>
<td>D</td>
<td>Further Joined and Summarized</td>
</tr>
<tr>
<td>H</td>
<td>Detail Joined views</td>
</tr>
<tr>
<td>O</td>
<td>Detail Base</td>
</tr>
</tbody>
</table>

- Budget, Human Resource, and Student, and curricular data for the Cost per Credit Reports
- State Instructional Budget Prorated over Teaching Departments
- Instructional Salaries Prorated over Student Levels
- Recent Curricular (1992-93)
- Student Course Section
- Course Section Allocation
- Instructor Course Section
- Budget Summary
- Budget Salary
- ODDS Discipline Conversion
Input Parameters Used By The Report

To view a report, run the IAIS report application, select the type of report you would like to see, and select the report you would like to view either by double clicking on the name of the report or by clicking on the 'View Report' button while the report name is highlighted. When the report is started a pop-up window will be displayed asking for the year and possibly a unit, division, or department (depending on the report selected) for which the data for the report is to reflect.

**Year:** The year must be entered as a six-digit number (example: 199495).

**Unit:** The unit must be entered as a one character uppercase unit code with no quote marks around it (example: A).

**Division:** The division must be entered as a three character uppercase unit and division code with no quote marks around it (example: A07).

**Department:** The department must be entered as a five character uppercase unit, division, and department code with no quote marks around it (example: A0722).

Report Levels

The Cost per Credit Report has been broken down into several different reports with different levels of summarization.

**Cluster Totals**

Cost per Credit data by UDD or Discipline totaled within cluster. For Doctoral cluster there are two versions of this report, one which includes divisions A45 (Law), A53 (Medical School) and A87 (School of Veterinary Medicine) at UW-Madison, and one which does not include those divisions. Needs input parameters year and term.

**Department Totals**

Cost per Credit data totaled within UDD for all units. Needs input parameter year.

**Department Totals - for a Single Unit**

Cost per Credit data totaled within UDD for a specific unit. Needs input parameters year and unit.

**Department Totals - for a Single Division**

Cost per Credit data totaled within UDD for a specific division within a unit. Needs input parameters year and division.

**Department Totals - for a Single Department**

Cost per Credit data totaled within UDD for a specific department within a unit. Needs input parameter year and department.

**Division Totals**

Cost per Credit data totaled within division for all units. Needs input parameter year.
Division Totals - for a Single Unit
Cost per Credit data totaled within division for a specific unit. Needs input parameters year and unit.

Division Totals - for a Single Division
Cost per Credit data totaled by UDD within division for a specific division within a unit. Needs input parameters year and division.

Unit Totals
Cost per Credit data totaled by UDD or Discipline within unit. There are two versions of this report for UM-Madison, one which includes divisions A45 (Law), A53 (Medical School) and A87 (School of Veterinary Medicine) at UW-Madison, and one which does not include those divisions. Needs input parameters year and term.

Unit Totals - for a Single Unit
Cost per Credit totaled by UDD or Discipline within unit for a specific unit. There are two versions of this report for UW-Madison, one which includes divisions A45 (Law), A53 (Medical School) and A87 (School of Veterinary Medicine) at UW-Madison, and one which does not include those divisions. Needs input parameters year, term, and unit.
### Report Layout

<table>
<thead>
<tr>
<th>Category</th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>115,547</td>
<td>133,633</td>
<td>787,190</td>
<td>195,819</td>
<td>125,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unclassified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classified</td>
<td>1,882</td>
<td>10,905</td>
<td>12,895</td>
<td>3,100</td>
<td>2,040</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>7,580</td>
<td>44,971</td>
<td>52,552</td>
<td>13,019</td>
<td>0,359</td>
<td></td>
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<tr>
<td>Capital</td>
<td>0,000</td>
<td>5,156</td>
<td>6,025</td>
<td>1,485</td>
<td>957</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>125,040</td>
<td>134,746</td>
<td>859,814</td>
<td>212,711</td>
<td>116,462</td>
<td></td>
<td></td>
<td>1,117,536</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Credits</td>
<td>1,151.20</td>
<td>4572.00</td>
<td>5,703.00</td>
<td>656.00</td>
<td>69.69</td>
<td></td>
<td></td>
<td>2,672.00</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Per Credit</td>
<td>100.50</td>
<td>169.71</td>
<td>150.55</td>
<td>246.49</td>
<td>1,977.21</td>
<td></td>
<td></td>
<td>202.69</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTE Students</td>
<td>75.41</td>
<td>304.00</td>
<td>380.20</td>
<td>71.53</td>
<td>9.85</td>
<td></td>
<td></td>
<td>464.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Per FTE</td>
<td>1,042.56</td>
<td>2,410.56</td>
<td>2,259.27</td>
<td>2,931.93</td>
<td>15,040.46</td>
<td></td>
<td></td>
<td>2,825.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTE Staff</td>
<td>0.05</td>
<td>1.65</td>
<td>1.71</td>
<td>1.65</td>
<td>1.14</td>
<td></td>
<td></td>
<td>4.55</td>
</tr>
<tr>
<td>Professors</td>
<td>0.00</td>
<td>0.39</td>
<td>0.39</td>
<td>1.48</td>
<td>0.21</td>
<td></td>
<td></td>
<td>2.10</td>
</tr>
<tr>
<td>Associate Prof</td>
<td>0.00</td>
<td>0.39</td>
<td>0.39</td>
<td>1.48</td>
<td>0.21</td>
<td></td>
<td></td>
<td>2.10</td>
</tr>
<tr>
<td>Assistant Prof</td>
<td>0.12</td>
<td>5.95</td>
<td>6.07</td>
<td>0.39</td>
<td>0.08</td>
<td></td>
<td></td>
<td>6.77</td>
</tr>
<tr>
<td>Instructors</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Legal Faculty</td>
<td>0.11</td>
<td>7.99</td>
<td>8.17</td>
<td>3.54</td>
<td>1.46</td>
<td></td>
<td></td>
<td>15.42</td>
</tr>
<tr>
<td>Academic Staff</td>
<td>0.00</td>
<td>16.36</td>
<td>19.97</td>
<td>4.05</td>
<td>0.99</td>
<td></td>
<td></td>
<td>29.31</td>
</tr>
<tr>
<td>Graduate Asst.</td>
<td>0.03</td>
<td>12.90</td>
<td>21.36</td>
<td>0.02</td>
<td>0.02</td>
<td></td>
<td></td>
<td>21.42</td>
</tr>
<tr>
<td>Total</td>
<td>0.02</td>
<td>93.92</td>
<td>40.54</td>
<td>0.21</td>
<td>1.47</td>
<td></td>
<td></td>
<td>66.72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level I</th>
<th>Level II</th>
<th>Undergrad</th>
<th>Level III</th>
<th>Level IV</th>
<th>Law</th>
<th>Med/PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student/Faculty FTE Ratio</td>
<td>42:1</td>
<td>36:1</td>
<td>42:1</td>
<td>20:1</td>
<td>71:1</td>
<td>10:1</td>
<td>1:1</td>
<td>35:1</td>
</tr>
<tr>
<td>STD Legal Fac</td>
<td>42:1</td>
<td>36:1</td>
<td>42:1</td>
<td>20:1</td>
<td>71:1</td>
<td></td>
<td></td>
<td>35:1</td>
</tr>
<tr>
<td>STD All Staff</td>
<td>1:1</td>
<td>8:1</td>
<td>1:1</td>
<td>9:1</td>
<td>7:1</td>
<td></td>
<td></td>
<td>8:1</td>
</tr>
</tbody>
</table>
Report Definitions

1. Budget - Group

When this group is labeled ‘Budget’ it signifies that the monetary data contained on this report was obtained from the Redbook budget. The actual file/table used to obtain the salary data is the UW.UA_BDGTTSAL_HIST table in the Doit Infoaccess data warehouse. The actual file/table used to obtain the supplies and capital data is the UW.UA_BDGTTSUM_HIST table in the Doit Infoaccess data warehouse.

**Budget – Instructional - row**

This row is the total amount budgeted for Unclassified Salaries funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Budget – Classified - row**

This row is the total amount budgeted for Classified Salaries funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Budget – Supplies - row**

This row is the total amount budgeted for Supplies and Expenses funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Budget – Capital - row**

This row is the total amount budgeted for Capital acquisitions funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Budget – Total - row**

This row is the total amount budgeted for Unclassified Salaries, Classified Salaries, Supplies/Expenses, and Capital funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

2. Cluster Summary

The level of summarization for this report is at the cluster level. This report summarizes the total FTE students, FTE instructional staff, budget or expenditure amount, and student official credits which are funded by state instructional funds within the given Cluster.
3. Cost per Credit - row
This is the cost of each official credit earned by student level. This is obtained by dividing the Budget – Total - row or Expenditures – Total – row amount by the total student official credits for each student level.

4. Cost per FTE Student - row
This is the cost of each calculated student FTE by student level. This is obtained by dividing the Budget – Total - row or Expenditures – Total – row amount by the total student FTE for each student level.

5. Department
A two character code that indicates the level of organization immediately under that of Division, generally an academic area. Displayed only on department level reports.

6. Department Name
The name of the Course Section Allocation UDD (Unit-Division-Department) for the fall term of the current year. Displayed only on department level reports.

7. Department Summary
The level of summarization for this report is at the department level. This report summarizes the total and average by FTE for course section enrollment, student official credits, and student contact periods which are funded by state instructional funds within the given Unit/Division/Department. The department is derived from the Course Section Allocation UDD.

8. Discipline Area
The one character code and the name for the general area of instruction given to a section, taken from the curricular area code table.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Law and Medical School</td>
</tr>
<tr>
<td>1</td>
<td>Social and Behavioral Sciences</td>
</tr>
<tr>
<td>2</td>
<td>Humanities</td>
</tr>
<tr>
<td>3</td>
<td>Engineering and Physical Sciences</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture and Life Sciences</td>
</tr>
<tr>
<td>5</td>
<td>Health Sciences</td>
</tr>
<tr>
<td>6</td>
<td>Clinical Health</td>
</tr>
<tr>
<td>P*</td>
<td>Prorated - All Areas</td>
</tr>
</tbody>
</table>

*Sections with discipline P are prorated and not shown as a separate discipline.
9. Division

A two character code that indicates the level of organization immediately under that of Unit - generally a school/college, campus in the UW Colleges, or major program area. Not displayed on unit or cluster level reports.

10. Division Name

The name of the Course Section Allocation UD (Unit-Division) for the fall term of the current year. Not displayed on unit or cluster level reports.

11. Division Summary

The level of summarization for this report is at the division level of a unit. This report summarizes the total and average by FTE for course section enrollment, student official credits, and student contact periods which are funded by state instructional funds within the given Unit/Division. The division is derived from the Course Section Allocation UD.

12. Expenditures - Group

When this group is labeled ‘Expenditures’ it signifies that the monetary data contained on this report was obtained from FMR Fiscal Year End data. The actual file/table used to obtain the salary data is the UW.UA_REQ_PRIOR in the Doit Infoaccess data warehouse. The actual file/table used to obtain the supplies and capital data is the UW.UA_FMR_ENC_EXP in the Doit Infoaccess data warehouse.

**Expenditures – Instructional - row**

This row is the total amount expended for Unclassified Salaries funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Expenditures – Classified - row**

This row is the total amount expended for Classified Salaries funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Expenditures – Supplies - row**

This row is the total amount expended for Supplies and Expenses funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

**Expenditures – Capital - row**

This row is the total amount expended for Capital acquisitions funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.
Expeditures – Total - row

This row is the total amount expended for Unclassified Salaries, Classified Salaries, Supplies/Expenses, and Capital funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels.

13. FTE Staff - Group

This group is the total FTE from the October Payroll funded with state instructional funds for the given level of summarization (department, division, unit or cluster) for a specified instructor type. (Example: the total FTE funded by state instructional funds for Professors for the given level of summarization).

Staff Type - Professors - row

This row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for a Professor. A Professor is an instructor whose title_code is C20NN.

Staff Type - Associate Prof - row

This row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for an Associate Professor. An Associate Professor is an instructor whose title_code is C30NN or C60NN.

Staff Type - Assistant Prof - row

This row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for an Assistant Professor. An Assistant Professor is an instructor whose title_code is C40NN.

Staff Type - Instructor - row

This row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for an Instructor. An Instructor is an instructor whose title_code is C50NN.

Staff Type - Legal Faculty - row

The Legal Faculty row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for Professors, Associate Professors, Assistant Professors, and Instructors.

Staff Type - Academic Staff - row

The Academic Staff row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit, discipline, or cluster), prorated over the student levels in the sections taught, for academic staff instructors. An Academic Staff instructor is an
instructor whose title_code does not fall under the guidelines for Legal Faculty or Graduate Assistant.

**Staff Type - Graduate Assistants - row**

This row is the total FTE funded with state instructional funds for the given level of summarization (department, division, unit or cluster), prorated over the student levels in the sections taught, for a Graduate Assistant. A Graduate Assistant is an instructor whose title_code begins with a 'Y'.

**Staff Type - Total row**

The Total row is the total FTE for all types of instructor columns.

### 14. FTE Student - row

This row is the calculated student FTE based on official credits and student level. It is computed by dividing the student official credits at each level by the average number of credit hours carried per semester by the various student levels. The exception is for Med and Vet Med students, who are each counted as one FTE regardless of the number of credits taken. See table below.

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Avg. Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>15</td>
</tr>
<tr>
<td>II</td>
<td>15</td>
</tr>
<tr>
<td>III / Ed Spec</td>
<td>12</td>
</tr>
<tr>
<td>IV</td>
<td>7</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
</tr>
<tr>
<td>Phm (pharmacy)</td>
<td>15</td>
</tr>
<tr>
<td>Med/Vet Med</td>
<td>Equal to 1 per student</td>
</tr>
</tbody>
</table>

### 15. Student Credits - row

This row of statistics is the total number of student official credits in both group and individual instruction sections for each student level.

### 16. Student Levels

**Student Level - Level-1 - column**

This column heading labels total and average statistics for students who are a Freshman, Sophomore, Centers' Special, or High School Special. Student Classification = A, B, I, or N.
**Student Level - Level-2 - column**

This row heading labels total and average statistics for students who are a Junior, Senior, Undergraduate Special, or Wisconsin Resident Age 62 and over auditor. Student Classification = C, D, J, or S.

**Student Level - Undergrad - column**

This column heading labels total and average statistics for Level I and Level II students combined.

**Student Level - Level-3 - column**

This column heading labels total and average statistics for students who are a Masters’ candidate, Education Specialist (except for Comprehensive cluster institutions), or Graduate Special. Student Classification = E or K.

**Student Level - Level-4 / ED SPEC - column**

This column heading may differ depending on the cluster of the institution being displayed.

When it prints 'Level 4', it labels total and average statistics for students who are Ph.D. candidate (Pre-prelim), or Dissertators (Post-prelim) at the Doctoral cluster. Student Classification = G, or H.

When it prints 'ED SPEC', it labels totals and averages of students who are Education Specialists at the Comprehensive cluster. Student Classification = F. Although “F” is officially a Level 3 student classification, for this report it is split out and reported separately from Level 3 students at the Comprehensive cluster institutions.

**Student Level - Law - column**

This column heading labels total and average statistics for students who are enrolled in the Law school at UW-Madison. Student Classification = L, or R.

**Student Level - Med/Vet/PHM - column**

This column heading labels total and average statistics for students who are enrolled in Medical, Veterinary Medicine, or Pharmacy at UW-Madison. Student Classification = M, P, Q, U, V, or W.

**Student Level - Total - column**

This column heading labels total and average statistics for all student levels combined.

**17. Student : Faculty FTE Ratio - group**

This group of statistics is the total student FTE per single instructional staff FTE by student level. This is obtained by dividing the student FTE by the instructional staff FTE for each student level.
**Student : Faculty STD : Legal Fac - row**

This row is the total student FTE per single Legal Faculty staff FTE by student level. This is obtained by dividing the student FTE by the Legal Faculty staff FTE for each student level. Legal Faculty consists of Professor, Associate Professor, Assistant Professor, and Instructor title codes.

**Student : Faculty STD : Staff - row**

This row is the total student FTE per single instructional staff FTE by student level. This is obtained by dividing the total student FTE by the total instructional staff FTE for each student level. In this row all instructional staff is included.

18. **Sub Department**

A two character code that indicates the level of organization immediately under that of Department, generally an academic area. Displayed only on subdepartment level reports.

19. **Sub-Department Name**

The name of the Course Section Allocation UDDS (Unit-Division-Department-Subdepartment) for the fall term of the current year. Displayed only on subdepartment level reports.

20. **Sub-Department Summary**

The level of summarization for this report is at the department level. This report summarizes the total and average by FTE for course section enrollment, student official credits, and student contact periods which are funded by state instructional funds within the given Unit/Division/Department. The department is derived from the Course Section Allocation UDD.

21. **Term**

The semester for which this report is generated. The report is normally generated for Term 1 (fall semester) only.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Summer</td>
</tr>
<tr>
<td>1</td>
<td>Fall</td>
</tr>
<tr>
<td>W</td>
<td>Winter</td>
</tr>
<tr>
<td>2</td>
<td>Spring</td>
</tr>
</tbody>
</table>
22. Unit

The one character code indicating one of the fourteen University of Wisconsin institutions. Not displayed on cluster level reports.

23. Unit Abbreviation

The abbreviation for the highest level (unit) of the Course Section Allocation UDD for the fall term of the current year. Not displayed on cluster level reports.

24. Unit Summary

The level of summarization for this report is at the unit level. This report summarizes the total FTE students, FTE Instructional Staff, Budget or Expense amount, and student official credits which are funded by state instructional funds within the given Unit.

25. Year

The six digit (199495) instructional year for which this report is generated.

Example: “199495” for 1994-95.

---

How To

How to derive an Instructor Type from a Title Code

If an instructor’s Title_code is C20NN, C30NN, C40NN, C50NN, or C60NN then the Instructor Type is Legal Faculty. If an instructor’s Title_code starts with Y then the Instructor Type is Graduate Assistant. If the Title_code is anything else then the Instructor Type is Academic Staff. Instructor Type is ranked, highest to lowest, as Professor, Associate Professor, Assistant Professor, Instructor, Graduate Assistant, and Academic Staff.

<table>
<thead>
<tr>
<th>Title Code</th>
<th>Instructor Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>C20NN</td>
<td>Professor</td>
</tr>
<tr>
<td>C30NN, C60NN</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>C40NN</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>C50NN</td>
<td>Instructor</td>
</tr>
<tr>
<td>C20NN, C30NN, C40NN, C50NN, C60NN</td>
<td>Legal Faculty</td>
</tr>
<tr>
<td>Starts with 'Y'</td>
<td>Graduate Assistant</td>
</tr>
<tr>
<td>Any other title code</td>
<td>Academic Staff</td>
</tr>
</tbody>
</table>

---
How to calculate an Instructor Type's Total FTE

Total the FTE_Split from the Human Resource data for all employees of a given title_code or title_code group within Student Level and UDD.

If an employee instructs a section and is funded by state instructional funds, his/her FTE is accumulated within his/her title-code or title-code group.

If an employee is funded by state instructional funds by a teaching department, but does not instruct a section, his/her FTE is prorated over all student levels within his/her instructor type and UDD.

If an employee is funded by state instructional funds in a non-teaching department (department that does not produce credits), his/her FTE is accumulated and reported as 'Non-Add' FTE at the unit and cluster level.

How to calculate Student Credits by Student Level

Accumulate the number of student official credits of a given student level in sections taught by the specified Type of Instructor within the given UDD. Total the student official credits by summing the number of official credits using a pre-created view which contains the official student credits defined by the Office of Policy Analysis and Research.

How to prorate Instructional FTE by Section for An Instructor That Teaches Multiple Sections

Multiply the fund fraction for the instructor times the ratio of the percent effort the instructor reported for the section to the total percent effort he/she reported for all sections. Any remainder is added to the FTE of the first section. If the percent of effort is missing or 0-filled, then the FTE is equally distributed among the sections.

Example:

<table>
<thead>
<tr>
<th>Instructor FTE = 0.8</th>
<th>Section Taught</th>
<th>%of Effort</th>
<th>FTE for the Sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>10</td>
<td>0.16</td>
<td>0.16 (0.8*10/50)</td>
</tr>
<tr>
<td>002</td>
<td>20</td>
<td>0.32</td>
<td>0.32 (0.8*20/50)</td>
</tr>
<tr>
<td>003</td>
<td>20</td>
<td>0.32</td>
<td>0.32 (0.8*20/50)</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>0.80</td>
<td></td>
</tr>
</tbody>
</table>

How to prorate Instructional FTE by Student Level in a Section

1. If total official credits for the section are not zero, the instructional FTE for the Student Level in a section is the FTE for the Section (from the above calculation) times the ratio of the official credits for the Student Level to the total official credits for the Section. When prorating instructional FTE for a student level, each student level receives a portion of the total FTE equal to the proportion of students official credits at a given level. Example:
Within a given section there are a total of 50 student credits, 10 student credits are Level 1, 40 student credits are Level 2. There is a total of 1.5 Academic Staff FTE associated with this section.

Prorated FTE for Level 1 = 0.3 FTE (10/50 = 20% * 1.5 FTE)
Prorated FTE for Level 2 = 1.2 FTE (40/50 = 80% * 1.5 FTE)

2. If the total official credits for the sections is zero, use enrollment to calculate the FTE for each Student Level as above (1.).

3. Whichever method is used, check the sum of the calculated FTEs by Student Level against the FTE for the Section, and apply any difference in FTE to Student Level-1.

**How to Prorate Non-Teaching FTE over Student Levels**

The FTE for an employee funded by state instructional funds must be accounted for regardless of whether or not that employee instructs a section.

If that employee is funded in a non-teaching department the FTE is accumulated as Non-Add FTE and printed on the Unit & Cluster Summary reports only.

If that employee is funded in a teaching department but does not teach a section the FTE is prorated in proportion to the teaching FTE at that rank. Example:

For a given rank (Professor) within a UDD:
- 6 (50%) of the instructional FTE are Level 1.
- 3 (25%) of the instructional FTE are Level 2.
- 2 (17%) of the instructional FTE are Level 3.
- 1 (8%) of the instructional FTE are Level 4.

If given that the total Non-Teaching FTE for Professors is 1 FTE
- Prorated non-teaching FTE for Level 1 = 0.50 FTE (50% * 1 FTE)
- Prorated non-teaching FTE for Level 2 = 0.25 FTE (25% * 1 FTE)
- Prorated non-teaching FTE for Level 3 = 0.17 FTE (17% * 1 FTE)
- Prorated non-teaching FTE for Level 4 = 0.08 FTE (8% * 1 FTE)

If there are no teaching FTE at that rank, and the Non-Teaching FTE is Legal Faculty, then the FTE is prorated over student level totals in proportion to the total staff FTE of all Legal Faculty staff types. If there is no other Legal Faculty FTE, or the Non-Teaching FTE is Graduate Assistant or Academic Staff, then the Non-Teaching FTE is prorated over student level totals in proportion to the total FTE of all staff types (faculty, graduate assistants, academic staff) and included in the total FTE of the teaching department. If there are no teaching FTE in the department, the Non-Teaching FTE is assumed to be in Level 1.

**How to Calculate Cost Per Credit**

Cost per Credit for each student level is computed by dividing the total amount budgeted or expended for a student level by the number of student official credits for that student level at the given level of summarization. The total Cost per Credit is calculated by dividing the total amount budgeted or expended for all student levels...
by the total number of student official credits for all student levels at the given level of summarization.

How to Calculate FTE Students

FTE Students is based on official credits and student level. It is computed by dividing the student official credits at each level by the average number of credit hours carried (official credit divisors) per semester of the various student levels. (See table below for official credit divisors). If Level I students had a total of 392 official credits at the given level of summarization, there would be 26.13 Student FTE at that summarization level. (392 credits / 15 credits per FTE = 26.13 FTE)

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Credit Divisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>15</td>
</tr>
<tr>
<td>II</td>
<td>15</td>
</tr>
<tr>
<td>III / Ed Spec</td>
<td>12</td>
</tr>
<tr>
<td>IV</td>
<td>7</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
</tr>
<tr>
<td>Phm (pharmacy)</td>
<td>15</td>
</tr>
<tr>
<td>Med/Vet Med</td>
<td>Equal to 1 per student</td>
</tr>
</tbody>
</table>

How to Calculate Cost Per FTE Student

Cost per FTE Student for each student level is computed by dividing the total amount budgeted or expended for a student level by the total student FTE for that student level at the given level of summarization. The total Cost per Student FTE is calculated by dividing the total amount budgeted or expended for all student levels by the total student FTE for all student levels at the given level of summarization.

How to Calculate Student/Faculty Ratios

This group of statistics is the ratio of the total student FTE per single instructional staff FTE by student level for the given level of summarization. This is obtained by dividing the student FTE by the instructional staff FTE for each student level.

**Student : Faculty STD : Legal Fac - row**

This row is the total student FTE per single Legal Faculty FTE by student level. This is obtained by dividing the student FTE by the Legal Faculty FTE for each student level. Legal Faculty consists of Professor, Associate Professor, Assistant Professor, and Instructor title codes.

If Level I students had a total of 78.67 Student FTE and 3.62 Legal Fac FTE at the given level of summarization, the ratio would be 24.57:1 Student FTE to Legal Faculty FTE.

**Student : Faculty STD : All Staff - row**

This row is the total student FTE per single instructional staff FTE by student level. This is obtained by dividing the student FTE by the
in this row all instructional staff is included.

If Level I students had a total of 78.67 Student FTE and 6.73 All Instructional Staff FTE at the given level of summarization, the ratio would be 11.70:1 Student FTE to All Instructional Staff FTE.

**How to Prorate Budget/Expenditure Amounts over Student Levels**

1. Prepare Budget/Expenditure file
   A. Convert fiscal year (4 digit) to academic year (6 digit)
   B. Convert amounts to a semester basis
      1. Capital, Supplies, and Classified Salaries
      2. Unclassified Salaries

2. Calculate Instructional Salary by Student Level for udds

3. Prorate budget or expenditure data using Instructional Salary ratios

**Prepare Budget/Expenditure file - Convert fiscal year**

Download the required data from UW-Madison’s DoIT InfoAccess data warehouse. Required data includes fiscal year, udds, fund, activity, and total instructionally funded budgeted amounts for capital, supplies, and salaries. Convert the four digit fiscal year to a six digit academic year by subtracting one from the fiscal year and concatenating the last two digits of the fiscal year to the new date. Ex. Fiscal Year = 1997. 1997 – 1 = 1996. 1996 || 97 = 199697 the academic year.

**Prepare Budget/Expenditure file - Convert to semester basis - Capital, Supplies, and Classified Salaries**

Downloaded capital, supplies, and classified salaries should already be totaled by udds, fund and activity for the fiscal year. Multiply the total yearly amount by 0.45 (45%) to obtain the total semester amount.

**Prepare Budget/Expenditure file - Convert to semester basis - Unclassified Salaries**

Downloaded Unclassified Salaries should already be totaled by ssn, pay basis, udds, fund and activity for the fiscal year. If the pay basis is ‘C’ or ‘B’ (academic year payment) multiply the total yearly amount by 0.50 (50%) to obtain the total semester amount. If the pay basis is ‘A’, ‘H’, or ‘*’ (annual payment) multiply the total yearly amount by 0.45 (45%) to obtain the total semester amount.
**Calculate Instructional Salary by Student Level for udds**

For each instructor that is at least partially funded by instructional funds prorate the full time salary of that instructor over the student levels that the instructor teaches.

1. Determine the FTE that an instructor uses to teach a section by multiplying the instructionally funded FTE by the Percent Effort allocated to that section, to get the amount of FTE allocated to a section. If the Percent Effort for all of an instructor’s sections is zero then equally divide the instructor’s FTE over all sections taught.

   Ex.- Instructor ‘A’ teaches 3 sections, total FTE is 0.75:
   - Section 001 Percent Effort = 50% Then section FTE = 0.375
   - Section 002 Percent Effort = 30% Then section FTE = 0.225
   - Section 003 Percent Effort = 20% Then section FTE = 0.150

   Ex.- Instructor ‘B’ teaches 3 sections, total FTE is 0.75:
   - Section 001 Percent Effort = 0% Then section FTE = 0.250
   - Section 002 Percent Effort = 0% Then section FTE = 0.250
   - Section 003 Percent Effort = 0% Then section FTE = 0.250

   Ex.- Instructor ‘C’ teaches 3 sections, total FTE is 0.75:
   - Section 001 Percent Effort = 10% Then section FTE = 0.075
   - Section 002 Percent Effort = 20% Then section FTE = 0.150
   - Section 003 Percent Effort = 30% Then section FTE = 0.225
   * note total section FTE (0.45) does not equal total FTE (0.75) – this is used only for salary ratio calculations, not staff FTE accumulation.

2. Calculate the amount of salary allocated to a section by multiplying the instructor’s total salary by the section FTE allocation.

   Ex.- Instructor ‘C’ total salary = 75,000:
   - Section 001 section FTE = 0.075, salary = 5625
   - Section 002 section FTE = 0.150, salary = 11,250
   - Section 003 section FTE = 0.225, salary = 16,875

3. Calculate the amount of salary allocated to a student level within a section by multiplying the section’s salary by the ratio of student level credits to total credits.

   Ex.- Instructor ‘C’, Section 002 salary = 11,250:
   - Section 002 Level 1 credits = 50, 11% of credits, salary = 1,250
   - Section 002 Level 2 credits = 250, 56% of credits, salary = 6,250
   - Section 003 Level 3 credits = 150, 33% of credits, salary = 3,750
   Total 450 credits

   Calculate the salary ratio by udds for a student level by totaling all salaries for a student level within a udds and then dividing by the total salary for all student levels within the udds.
Prorate budget or expenditure data using Instructional Salary ratios

Within a given udds, total all student level salary amounts to obtain the total udds salary amount. Prorate the semester budget amounts (calculated earlier) over the student levels within the udds in the ratio of udds student level salary to total udds salary.

Ex.- UDDS A010101 total Unclassified Salary Budget is $75,000
    UDDS A010101 total Classified Salary Budget is $125,000
    UDDS A010101 total Supplies Budget is $5,000
    UDDS A010101 total Capital Budget is $25,000

    UDDS A010101 total salary is $200,000
    UDDS A010101calculated Level 1 salary is $20,000
    UDDS A010101calculated Level 2 salary is $150,000
    UDDS A010101calculated Level 3 salary is $30,000

Level 1 Unclassified Salary Budget = $7,500
    75,000 * (20,000/200,000)
Level 2 Unclassified Salary Budget = $56,250
    75,000 * (125,000/200,000)
Level 3 Unclassified Salary Budget = $11,250
    75,000 * (30,000/200,000)

Prorate the Classified Salary, Supplies, and Capital budget amounts using the same salary ratio as the Unclassified Salary budget.

For Department Level summarization budget amounts are calculated by accumulating all subdepartment amounts for each student level.

Ex. – UDDS A010101 Student Level 1 Supplies = 100,000
    UDDS A010102 Student Level 1 Supplies = 50,000
    UDDS A010103 Student Level 1 Supplies = 250,000
    Department (UDD) A0101 Student Level 1 Supplies = 400,000
Illustrated Methodology (1975)

THE UNIVERSITY OF WISCONSIN SYSTEM

Analysis Paper #13 October, 1975

AN INSTRUCTIONAL COST-PER-CREDIT METHODOLOGY:

AN ILLUSTRATED EXPLANATION

Background

Interest in the development of a cost per credit of instruction rose to new levels during the latter 1960’s and early 1970’s as the concern for increased accountability in public higher education became a dominant theme. This interest in the potential use of cost-per-credit information was further intensified by more recent concern in the higher education community regarding academic program evaluation in a time of economic retrenchment.

In the University of Wisconsin System, a cost per credit of instruction was developed in 1969 and, since that time had been viewed largely in an experimental context, with several modifications being made in the methodology since its inception. Recently, however, the cost-per-credit calculations took on operational significance by serving as one of several primary inputs into the computation of the Composite Support Index (see Analysis Paper #12 for further background on the CSI).

The purpose of this paper is to provide an understanding of the basic methodology leading to the calculation of cost per credit of instruction by student level within the University of Wisconsin System.

I. THE ORGANIZATIONAL CONTEXT

A cost per credit of instruction is calculated for each budgetary entity (normally a department) that engages in credit instruction within an institution. The cost per credit then is summarized by organizational/budgetary categories to OPA division (school or college), unit (institution) and cluster (University, Doctoral, Center) levels of aggregation. It also is summarized by academic disciplinary groupings, from-department to discipline areas (Social and Behavioral Sciences, Humanities,
Engineering and Physical Sciences, Agriculture and Life Sciences, Health Sciences, Clinical Health), at the unit and cluster levels.

The discussion that follows is illustrated by moans of an hypothetical for example:

Unit: UW-University
Divisions College of Metaphysics
Department: Department of Mysteria.

II. THE DATA INPUTS

In order to calculate a departmental cost per credit of instruction by student level, the following components of information are required:

A. CURRICULAR DATA
   the number of credits taught by student level within each course section by UDDS

B. BUDGET DATA
   the state General Purpose Revenue/Fees instructional budget by UDDS

C. FACULTY DATA
   the total salary of each state-funded instructional faculty member by UDDS
   the percent of faculty effort expended on each course section of instruction by UDDS

Each of these required data components will be examined in greater detail in the next three sections.

III. REQUIRED CURRICULAR DATA

Curricular data are collected from each institution for each course section taught. The data collected are the number of student-credits taught in each course section, aggregated by student level. An illustration of such data is presented in Table 2.

TABLE 2. CURRICULAR DATA
Department: Mysteria
The curricular data is used to establish the population of credit-producing departments (or budgetary entities) within the institution to be used in developing a cost per credit of instruction. The number of credits taught by student level within each course section is then summarized by organizational/budgetary categories (by Unit-Division-Department-Subdepartment: UDDS) in a step preparatory to the calculation of a cost per credit of instruction.

### IV. REQUIRED BUDGET DATA

The next required data input is the fiscal-year instructional budget by UDDS, excluding (1) non-state instructional funds, (2) summer session funds, and (3) fringe benefits. In addition, the budget is adjusted for any major change in status, such as merit increases or enrollment funding changes.
The state GPR instructional funds (minus the exceptions noted above) by UDDS then are converted to a semester basis. This requires adjusting the unclassified salaries, and the classified salaries, supplies and expenses, and capital for each UDDS. Unclassified Salaries. First, unclassified salaries paid by state GPR instructional funds are adjusted by multiplying the unclassified salaries by .45 (for fiscal year unclassified salaries) or by .50 (for academic year unclassified salaries). The factor .45 is used to adjust annual salaries for summer session assignments, calculated as .1 of the total annual load. Table 4 provides an example of the budget detail for unclassified staff in an hypothetical department and illustrates the semester salary-adjustment factors.

<table>
<thead>
<tr>
<th>Faculty Identification</th>
<th>Rank</th>
<th>Fund Activity</th>
<th>Pay Basis</th>
<th>Salary</th>
<th>Semester Factor</th>
<th>Semester Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.M. Magic</td>
<td>Professor</td>
<td>102-2</td>
<td>C</td>
<td>$10,000</td>
<td>0.50</td>
<td>$5,000</td>
</tr>
<tr>
<td></td>
<td>Assoc Professor</td>
<td>144-4*</td>
<td>C</td>
<td>10,000*</td>
<td>5,000*</td>
<td></td>
</tr>
<tr>
<td>Harry O. Hand</td>
<td>Assoc Professor</td>
<td>102-2</td>
<td>C</td>
<td>18,000</td>
<td>0.50</td>
<td>9,000</td>
</tr>
<tr>
<td>S. O. Mindly</td>
<td>Asst Professor</td>
<td>102-2</td>
<td>A</td>
<td>18,000</td>
<td>0.45</td>
<td>8,100</td>
</tr>
<tr>
<td>Bright Starr</td>
<td>Asst Professor</td>
<td>102-2</td>
<td>C</td>
<td>16,000</td>
<td>0.50</td>
<td>8,000</td>
</tr>
<tr>
<td>Group Position</td>
<td></td>
<td>102-2</td>
<td>C</td>
<td>8,000</td>
<td>0.50</td>
<td>4,000</td>
</tr>
</tbody>
</table>

* Excluded from Cost-per-Credit
Calculation

**Classified salaries.** The classified staff salaries, being annual salaries, are multiplied by .45, in converting them to a semester basis. This is done for each UDDS.

**Supplies and expenses.** Similarly, supplies and expenses paid out of state GPR instructional funds by UDDS are multiplied by .45 in order to obtain the semester-based amount.

**Capital.** The portion of the budget devoted to capital expenses also is adjusted to a semester basis by multiplying the capital expense portion of the budget by .45 for each UDDS.

Table 5 provides an example of an hypothetical department for which the budgeted costs pertinent to the calculation of the cost per credit of instruction have been adjusted to a semester basis.

**Table 5. Semester-Based Budget For Mysteria (Z-25-1000)**

<table>
<thead>
<tr>
<th>Salaries</th>
<th>Supplies &amp; Expenses</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Academic</td>
<td>Classified</td>
</tr>
<tr>
<td>99,000</td>
<td>70,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Semester Factor</td>
<td>0.45 or .50</td>
<td>0.45</td>
</tr>
<tr>
<td>(See Table 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester-Based Budget</td>
<td>47,150</td>
<td>34,100</td>
</tr>
</tbody>
</table>

* Includes only state GPR instructional funds

Having adjusted the state GPR instructional budgets by UDDS in the manner described above, the next step is to prorate the budgets of the non-credit-producing departments to the credit-producing departments. This step might be viewed as the proration of non-teaching overhead.

Non-teaching overhead. Finally, the curricular data files containing the population of credit-producing departments (or budgetary entities) are used to identify the non-credit-producing departments. The adjusted state GPR instructional budgets of these non-credit-producing departments then are prorated to the credit-producing departments within UDDS on the basis of their portion of the total student credits taught. In addition, any major budget adjustments (such as merit increases or enrollment funding changes) are allocated to the credit-producing departments on the same credit-share basis.
The objective of the procedures described above is a semesterly state GPR/Fee instructional budget by category for each credit-producing UDDS.

V. REQUIRED FACULTY DATA

The third set of input data pertain to determining the population of teaching faculty and the percent effort they expend on the teaching of each course section. These data, in combination with the number of student credits taught per course section by student level, enable the calculation of state-funded faculty salary costs by student level for each course section. These calculations, when aggregated by student level across all course sections of instruction within each department, yield allocation ratios which then are used in the final computation steps of the costs per credit of instruction by UDDS.

Each of these steps in preparing the faculty data input is examined below:

**Teaching faculty.** The first step is to identify all teaching faculty. This information is gained from the curricular files which indicate, for each course section taught, the instructor or instructors.

**State-funded.** Next, the task is to determine those teaching faculty who are paid from state GPR/Fee instructional funds. This is accomplished by turning to the October payroll and extracting the rank, full-time rate, pay basis, and percent FTE by UDDS and fund-activity codes for all unclassified staff paid wholly or partially from state GPR instructional funds. This listing of state-funded faculty then is matched with the list of teaching faculty (gained from the curricular data), thereby defining the population of all teaching faculty paid wholly or partially from state GPR instructional funds.

The monthly salary for this population of teaching faculty then is annualized to a semester basis. This is achieved by multiplying the annualized-salary by .5 for academic-year faculty and by .45 for annual faculty. The factor .45 is used to adjust annual salaries for summer session assignments, calculated as .1 of the total annual load. Table 6 contains an illustration of the procedure by which the semester-based salary of the teaching faculty population is computed.

<table>
<thead>
<tr>
<th>Table 6: Faculty Salary Computation (Payroll Information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Identification</td>
</tr>
<tr>
<td>Bright Starr</td>
</tr>
</tbody>
</table>
Faculty effort. Knowing the population of state-funded teaching faculty, each faculty member responsible for teaching one or more course sections reports the percent of effort expended on each course section on a full-term basis. The effort estimate is to represent a percent of the teaching faculty member's total University-related activities, regardless of the source of funds. (See data element #1150 in the Data Element Dictionary for a more complete definition of this element).

The next objective is to use the percent effort estimates to prorate the salaries of teaching faculty to each of the course sections taught. Before this can be done, however, the percent effort estimates must be adjusted in a certain instance; this instance is described below.

Percent effort adjustment. There are three basic conditions that can exist in the relationship between the total percent of effort expended by each faculty member in his/her course section(s) and his/her state-funded instructional salary: (1) the faculty member's salary is funded entirely from state GPR/fee instructional funds; (2) the faculty member's salary is funded partially from state GPR/fee instructional funds and that percent of state-funded pay is greater than or equal to the total percent of effort expended by the faculty member on all of his/her course sections; or, (3) the faculty member's salary is funded partially from state GPR instructional funds and that percent of state-funded pay is less than the total percent of effort reported by the faculty member on all of his/her course sections.

Depending upon which condition exists for each teaching faculty member paid wholly or partially from state GPR instructional funds, one of two procedures is followed in the proration of state GPR instructional salary dollars to course sections by student level. Table 7 provides an example of an hypothetical department in which these three different conditions exist and illustrates the circumstances under which each of the two procedures is applied.

<table>
<thead>
<tr>
<th>Faculty Identification</th>
<th>State-Instructional Funding Percent</th>
<th>Total Percent Effort</th>
<th>Adjusted Total Percent Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 1</td>
<td>Bright Starr</td>
<td>100% *</td>
<td>80%**</td>
</tr>
<tr>
<td></td>
<td>No adjustment of faculty percent effort required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition 2</td>
<td>I. M. Magic</td>
<td>50%*</td>
<td>50%**</td>
</tr>
<tr>
<td></td>
<td>No adjustment of</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.
Condition 3

I. M. Magic

Assume the following faculty percent effort:

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC 1</th>
<th>CLAI 560</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 690</td>
<td>45%</td>
<td>75%</td>
</tr>
</tbody>
</table>

75% is greater than the 50% of I. M. Magic's salary which is funded from state-instructional funds. The faculty percent of effort is adjusted for each section proportionately.

\[
\begin{align*}
\text{CLAI 560} & : \frac{30}{75} \times 50\% = 20\% \\
\text{PSYC 690} & : \frac{45}{75} \times 50\% = 30\% 
\end{align*}
\]

* See Table 6
** See Table 8

Under conditions #1 and 2, the same procedure is followed. In these instances, the faculty member's total salary (regardless of fund source) is multiplied by the percent of that faculty member's effort associated with each course section taught. This procedure provides the number of state-funded salary dollars devoted to the instruction of each course section.

Condition #3 presents a special situation. In this instance, the above procedure would be inappropriate since the dollar amount derived by multiplying the total salary by the percent of faculty effort by course section would result in a prorated salary amount in excess of the state GPR instructional portion of the faculty member's total salary. Consequently, the indicated percent of effort estimates by course section are adjusted proportionately downward, using the state GPR instructional salary split of the total salary as the new base. This assures that the entire state-funded instructional portion of the total salary is prorated to the course sections and that it is prorated in the same proportionate manner as indicated by the original (unadjusted) faculty percent of effort estimates.
**Proration by student level.** The net result of the above steps is the proration of the state instructional salaries of teaching faculty to each of the course sections taught. The next step is to prorate these allocated salary dollars across the student levels within each course section. This is accomplished by distributing the salary dollars on the basis of the number of credits taught at each student level as a proportion of the total number of student credits taught in the course section.

<table>
<thead>
<tr>
<th>Faculty Identification</th>
<th>Semester</th>
<th>Course</th>
<th>Section</th>
<th>Effort</th>
<th>Allocation by Student Level</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.M Magic</td>
<td>$10,000</td>
<td>CLAI 560</td>
<td>Lec 1</td>
<td>20</td>
<td>$2,000</td>
<td>--</td>
<td>0.3500</td>
<td>0.6500</td>
<td>$0</td>
<td>$700</td>
<td>$1,300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PSYC 690</td>
<td>Lec 1</td>
<td>30</td>
<td>3,000</td>
<td>--</td>
<td>--</td>
<td>1.0000</td>
<td>0</td>
<td>0</td>
<td>3,000</td>
</tr>
<tr>
<td>Harry O. Hand</td>
<td>9,000</td>
<td>PALM 205</td>
<td>Lec 1</td>
<td>35</td>
<td>3,150</td>
<td>1.0000</td>
<td>--</td>
<td>--</td>
<td>3,150</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PALM 205</td>
<td>Lab 1</td>
<td>15</td>
<td>1,350</td>
<td>1.0000</td>
<td>--</td>
<td>--</td>
<td>1,350</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PALM 205</td>
<td>Lab 2</td>
<td>15</td>
<td>1,350</td>
<td>1.0000</td>
<td>--</td>
<td>--</td>
<td>1,350</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ASTR 101</td>
<td>Lec 3</td>
<td>25</td>
<td>2,025</td>
<td>1.0000</td>
<td>--</td>
<td>--</td>
<td>2,250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S. O. Mindly</td>
<td>8,100</td>
<td>PARA 103</td>
<td>Lec 1</td>
<td>15</td>
<td>1,215</td>
<td>0.2333</td>
<td>0.7000</td>
<td>0.0667</td>
<td>283</td>
<td>851</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TELE 340</td>
<td>Lec 1</td>
<td>25</td>
<td>2,025</td>
<td>0.0333</td>
<td>0.8333</td>
<td>0.1334</td>
<td>68</td>
<td>1,687</td>
<td>270</td>
</tr>
<tr>
<td>Bright Starr</td>
<td>8,000</td>
<td>ASTR 101</td>
<td>Lec 1</td>
<td>20</td>
<td>1,600</td>
<td>0.9857</td>
<td>0.0143</td>
<td>--</td>
<td>1,577</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ASTR 101</td>
<td>Lec 2</td>
<td>20</td>
<td>1,600</td>
<td>0.9750</td>
<td>0.2500</td>
<td>--</td>
<td>1,560</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHREN 203</td>
<td>Lec 1</td>
<td>20</td>
<td>1,600</td>
<td>0.8400</td>
<td>0.1600</td>
<td>--</td>
<td>1,344</td>
<td>256</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHREN 203</td>
<td>Lec 2</td>
<td>20</td>
<td>1,600</td>
<td>1.0000</td>
<td>--</td>
<td>--</td>
<td>1,600</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total For Mysteria</td>
<td>(Z-25-1000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$14,532</td>
<td>$3,557</td>
<td>$4,651</td>
</tr>
</tbody>
</table>

* See Table 2 for the credit by student level detail.

The final result of the above five steps is the semester-based state-funded salary cost by student level per course section taught. These salary costs, then are aggregated to
obtain the salary costs by student level by UDDS. Thus, to this point in the paper (and in the overall process), three basic data files have been created as input into the calculation of a cost per credit of instruction: (1) a curricular file containing the number of credits taught by student level by UDDS; (2) a budget file containing the adjusted state GPR instructional budget by UDDS; and (3) a salary file containing the faculty salary costs by student level by UDDS.

VI. BUDGET ALLOCATION RATIOS

The next major phase in the development of the cost per credit is the derivation of ratios by which the adjusted budget can be associated with the credits taught by student level by UDDS.

The ratios are obtained by calculating the state-funded instructional faculty salaries contained at each student level by UDDS as a proportion of the total state-funded instructional salary amount within each UDDS.

Next, the ratios are applied to the adjusted budget amounts by UDDS, resulting in the budgeted costs of instruction by student level by UDDS. Table 9 provides an example of the budget allocation ratio calculations and application.

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Total</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty Instructional Salaries (See Table 8)</td>
<td>22,740</td>
<td>14,532</td>
<td>3,557</td>
<td>4,651</td>
</tr>
<tr>
<td>2. Allocation Ratio</td>
<td>1.000</td>
<td>0.639</td>
<td>0.156</td>
<td>0.205</td>
</tr>
<tr>
<td>3. Semester-Based Budget (See Table 5)</td>
<td>47,150</td>
<td>30,129</td>
<td>7,355</td>
<td>9,666</td>
</tr>
<tr>
<td>4. Student Credits (See Table 2 Total)</td>
<td>1,350</td>
<td>1,068</td>
<td>192</td>
<td>90</td>
</tr>
<tr>
<td>5. Cost per Credit by UDDS (Line 3 + Line 4)</td>
<td>34.90</td>
<td>28.21</td>
<td>38.31</td>
<td>107.40</td>
</tr>
</tbody>
</table>

VII. COST PER CREDIT BY UDDS

The final step is to calculate the cost per credit of instruction by student level by UDDS. This is accomplished by dividing the state budgeted costs of instruction by student level by UDDS by the credits taught by student level by UDDS. Table 9 provides an illustration of this calculation step.
Glossary of Terms

Activity
From the Human Resources database, the activity identifies the purpose for which money is being spent or budgeted. Activity 2 is instruction.

Appointment
An appointment is the association between a person providing services and a position at UW System based on statutes and appropriate personnel policies and procedures. Only one person is ever associated with a specific appointment at one time, but a person may hold more than one appointment.

Cluster
A way of grouping UW System institutions. UW-Madison and UW-Milwaukee are in the Doctoral Cluster. Other UW four year institutions are in the Comprehensive Cluster. Campuses in the UW Colleges are grouped in the UW Colleges Cluster.

Cooperative Advanced Placement Program
CAPP - Sections taught in a Wisconsin high school by a university approved high school teacher.

Course Section Allocation
The UDD of a section which must at least partially support the salary of the instructor(s) teaching the section. Taken from the Course Section Allocation table.

Cross-listed Section
A section with an 'X' in the xlist_ind field on the Course Section table. A cross-listed section is tied to an enrollment carrying section, and the enrollment carrying section is reported as the only section, with the total number of student enrollment, credits, and contact periods reported under this single section. The totals are reported under the instructor type the enrollment carrying section.
Department
A two character code that indicates the level of organization immediately under that of Division, generally an academic or administrative area.

Dependent Section
A Dependent Section is the instruction of this section "depends" on another section in the same course. Discussion and Laboratory sections "depend" on a section in the same course that is Lecture.

Discipline Area
A discipline area is a general area of studies. Each UDDS code is associated with one major discipline area.

<table>
<thead>
<tr>
<th>Discipline Area Code</th>
<th>Discipline Area Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Law and Medical School</td>
</tr>
<tr>
<td>1</td>
<td>Social and Behavioral Sciences</td>
</tr>
<tr>
<td>2</td>
<td>Humanities</td>
</tr>
<tr>
<td>3</td>
<td>Engineering and Physical Sciences</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture and Life Sciences</td>
</tr>
<tr>
<td>5</td>
<td>Non-clinical Health Sciences</td>
</tr>
<tr>
<td>6</td>
<td>Clinical Health Sciences</td>
</tr>
<tr>
<td>P</td>
<td>Prorated – all areas</td>
</tr>
</tbody>
</table>

Division
A two character code that indicates the level of organization immediately under that of Unit. Generally a school/college, campus at UW Colleges, or major administrative or program area.

Enrollment
The number of official students enrolled in a course section.

Enrollment Carrying
A section with an 'E' in the xlist_ind field on the Course Section table. An enrollment carrying section can be tied to a cross-listed section. If it is, the enrollment carrying section is considered the only section, with the total number of students enrolled, student credits, and contact periods from cross-listed sections included in this enrollment carrying section.
**FTE**

Full Time Equivalent - 1.00 for a full time employee or student, 0.50 for a ½ time employee or student, etc.

**FTE Students**

The Full Time Equivalent for a student. It is based on official credits and student level. It is computed by dividing the student official credits at each level by the average number of credit hours carried (official credit divisors) per semester of the various student levels. (See table below for official credit divisors).

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Credit Divisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>15</td>
</tr>
<tr>
<td>II</td>
<td>15</td>
</tr>
<tr>
<td>III / Ed Spec</td>
<td>12</td>
</tr>
<tr>
<td>IV</td>
<td>7</td>
</tr>
<tr>
<td>Law</td>
<td>15</td>
</tr>
<tr>
<td>Phm (pharmacy)</td>
<td>15</td>
</tr>
<tr>
<td>Med/Vet Med</td>
<td>Equal to 1 per student</td>
</tr>
</tbody>
</table>

**Group Instruction**

A teaching method where by a group of students normally meet with their instructor(s) in a specified time and place. Sections with a Type of Instruction of C (lecture), D (discussion), L (laboratory), and S (seminar) are considered group instruction type sections.

**Individual Instruction**

Individual Instruction includes sections that are usually determined by the span of supervision of a specific instructor rather then the meeting time and place or students taking individual topics with an instructor. Sections with a Type of Instruction of E (extended degree), F (field experience) and I (independent/individualized) are considered individual instruction type sections.

**Instructional Fund**

Instructional funds are GPR (General Program Revenue) funds with an Activity of 2. The funds used for budgeting instructional activity can change from year to year.

**Instructor Type**

The type of instructor for a section, derived from the title code.

<table>
<thead>
<tr>
<th>Title Code</th>
<th>Instructor Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>C20NN</td>
<td>Professor</td>
</tr>
</tbody>
</table>
### January Practica

Short courses offered in January at UW-Green Bay. As of 1995-96 these courses are no longer offered.

### Legal Faculty

An instructor with one of the following title codes:

<table>
<thead>
<tr>
<th>Title Code</th>
<th>Instructor Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>C20NN</td>
<td>Professor</td>
</tr>
<tr>
<td>C30NN, C60NN</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>C40NN</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>C50NN</td>
<td>Instructor</td>
</tr>
</tbody>
</table>

If a section has multiple instructors the major instructor is the one that is assigned the greatest number of hours instructing the section. If there is no single instructor that teaches the greatest number of hours then the major instructor is the one with the highest ranking title code.

### Official Credits

The number of credits earned by official students enrolled in a course section.

### Official Student

Students who are not enrolled in excluded sections, and students who do not have a student classification of 'T' (WI resident receive federal OASDI benefits). Excluded sections include Extension, CAPP, Year Abroad, and Remedial sections. If a student is enrolled in any of the excluded sections, he/she is only excluded from the enrollment, credit, and contact period counts for this section. The student is not dropped from all counts.
Primary Section
The section is the main type of instruction for a course. If all sections of a course are the same type of instruction then all sections are primary sections. If the sections of a course are more than one type of instruction the sections taught by Lectures are considered the primary sections.

Prorated effort for credits and enrollments
For a section in which there are multiple instructors, this represents the effort an instructor expends relative to that of the other instructors. This can be either a proration percent for each instructor, or zero, which will be defaulted to have the workload equally divided among the multiple instructors associated with the section.

Remedial
Course sections for students who have deficiencies in English and/or mathematics.

Section
A group of students meeting at the same time and place for the same type of instruction with the same instructor.

Student Contact Periods
The number of actual hours per week an instructor spends teaching (in contact with) each student in a course section. For example, if an instructor teaches a group instruction section for three periods each week (each period is 50 minutes and the course is for the duration of the semester) and there are 30 students enrolled in that course section, there is 90 student contact periods (3 periods * 30 students) per week.

Student Enrollment
The number of official students registered in a specific course section. An official student is counted once for each section in which he/she is registered.

Student Level
A way to group students based on student classification.

<table>
<thead>
<tr>
<th>Student Level</th>
<th>Student Classification</th>
<th>Classification Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>Freshman</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>Sophomore</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>Special (non-matriculated student assessed undergraduate fees - UW Colleges only)</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>High School</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>Junior, Pharmacy 1</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>Senior, Pharmacy 2 and 3</td>
</tr>
<tr>
<td>---</td>
<td>----</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>Special (non-matriculated student assessed undergraduate fees - University &amp; Doctoral cluster.)</td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>WI resident age 62 or over, audit only</td>
</tr>
<tr>
<td>3</td>
<td>E</td>
<td>Masters</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>Education Specialist - printed on a separate line, not included in the Level 3 line for Comprehensive Cluster.</td>
</tr>
<tr>
<td>3</td>
<td>K</td>
<td>Special (non-matriculated student assessed graduate fees)</td>
</tr>
<tr>
<td>4</td>
<td>G</td>
<td>PhD (Pre-prelim)</td>
</tr>
<tr>
<td>4</td>
<td>H</td>
<td>PhD (Post-prelim)</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>Law</td>
</tr>
<tr>
<td>Law</td>
<td>R</td>
<td>both Law and Graduate</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>M</td>
<td>Medical</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>P</td>
<td>Pharmacy Professional</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>Q</td>
<td>both Medical and Graduate</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>U</td>
<td>both Pharmacy Professional and Graduate</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>V</td>
<td>Veterinary Medicine</td>
</tr>
<tr>
<td>Med/Vet/Phm</td>
<td>W</td>
<td>both Veterinary Medicine and Graduate</td>
</tr>
</tbody>
</table>

**Student Official Credits**

The number of credits earned in a course section by an official student.

**Study Abroad**

Course sections where a student takes courses both at a UW Institution and at a foreign institution as part of a study abroad program.

**Term**

The semester or term for which this report is created. There are four possible terms - 1 = fall, 2 = spring, S = summer, and W = winter. Generally this report is created for the fall term only.

**Type of Instruction**

The one character code indicating the instruction type of a course section, taken from the course section table.
Type of Instruction | Description | Instruction Category
--- | --- | ---
C | Lecture | Group
D | Discussion | Group
E | Extended Degree | Individualized
F | Field Experience | Individualized
I | Independent/Individualized | Individualized
L | Laboratory | Group
S | Seminar | Group

**UDD**
The Unit, Division, and Department code in which the instructor is funded.

**Unclassified**
University of Wisconsin staff titles for appointments based on University of Wisconsin Unclassified Personnel Guideline #2 Attachment 1, and State Statutes. Unclassified staff generally consist of faculty and academic staff.

**Unidentified Section**
A section that has a section number of 'XXX'.

**Unit**
The one character code indicating one of the fourteen University of Wisconsin System institutions.

**UW Extension Credit Program**
Course sections funded by UW-Extension but reported by the institution offering the credits and collecting the fees.

**Year**
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## Index

### A
- Academic Staff 4–5, 4–5, 10–11, 10–11
- Assistant Professor 4, 8
- Associate Professor 4, 8

### C
- Cluster 7–8, 7–8, 9, 10
- cross-listed 2

### D
- Department 9, 10

### E
- enrollment 10

### F
- FTE 9–11, 9–11

### G
- Graduate Assistant 8

### I
- individual instruction 5
- instructional funding 8, 10
- Instructors 2

### L
- Legal Faculty 5, 8, 10

### P
- Professor 4, 8, 10

### S
- student level 1–7, 1–7, 9
- student official credits 7–8, 7–8, 9

### U
- Unit 10–11, 10–11