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

Faculty Contact Hours- Calculated

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



This manual was produced using *Doc-To-Help*®, by WexTech Systems, Inc.

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Contents

IAIS - Faculty Contact Hours - Calculated	1
Overview.....	1
General Rules and Guidelines.....	1
Instructors.....	1
Sections.....	1
Summarizing Data.....	1
Levels of Summarization.....	2
Input Parameters Used By The Report.....	1
Report Levels.....	1
Report Layout.....	1
Report Definitions.....	1
1. Cluster Summary.....	1
2. Department.....	1
3. Department Name.....	1
4. Department Summary.....	1
5. Dept. FTE - row.....	1
6. Division.....	1
7. Division Summary.....	1
8. Group Instruction - row.....	2
9. Individual Inst - row.....	2
10. Instructor Type - Academic Staff - column.....	2
11. Instructor Type - Assoc Prof - column.....	2
12. Instructor Type - Asst Prof - column.....	2
13. Instructor Type - Graduate Assistants - column.....	2
14. Instructor Type - Instructor - column.....	2
15. Instructor Type - Legal Fac - column.....	2
16. Instructor Type - Professor - column.....	3
17. Instructor Type - Total column.....	3
18. Term.....	3
19. Unit.....	3
20. Unit Abbreviation.....	3
21. Unit Summary.....	3
22. Year.....	3
How To.....	4
How to determine a section's Instructor Type.....	4
How to derive an Instructor Type from a Title Code.....	4
How to determine the Instructor Type for a Section with multiple Instructor - Human Resource matches.....	5
How to calculate an Instructor Type's Total FTE.....	5
How to calculate Group Instruction Contact Hours.....	6
How to calculate Individual Instruction Contact Hours.....	6
How to calculate Faculty Contact Hours per FTE.....	6
How to prorate Instructional FTE by Section for An Instructor That Teaches Multiple Sections.....	6

Detail Data Elements Needed:	1
Glossary of Terms	3
Index	9

IAIS - Faculty Contact Hours - Calculated

Overview

The Faculty Contact Hours - Calculated report contains information from a procedure which calculates the number of periods per week instructors spend teaching a section. The report lists the total and average by FTE of group instruction and individual instruction faculty contact hours. The totals and averages are grouped by type of instructor within UDD (Unit, Division, Department). The report is also summarized by division, unit and cluster level. This report is normally created for the fall term of the current year.

General Rules and Guidelines

Instructors

Instructors used for this report are employees who are associated with at least one course section or 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*:

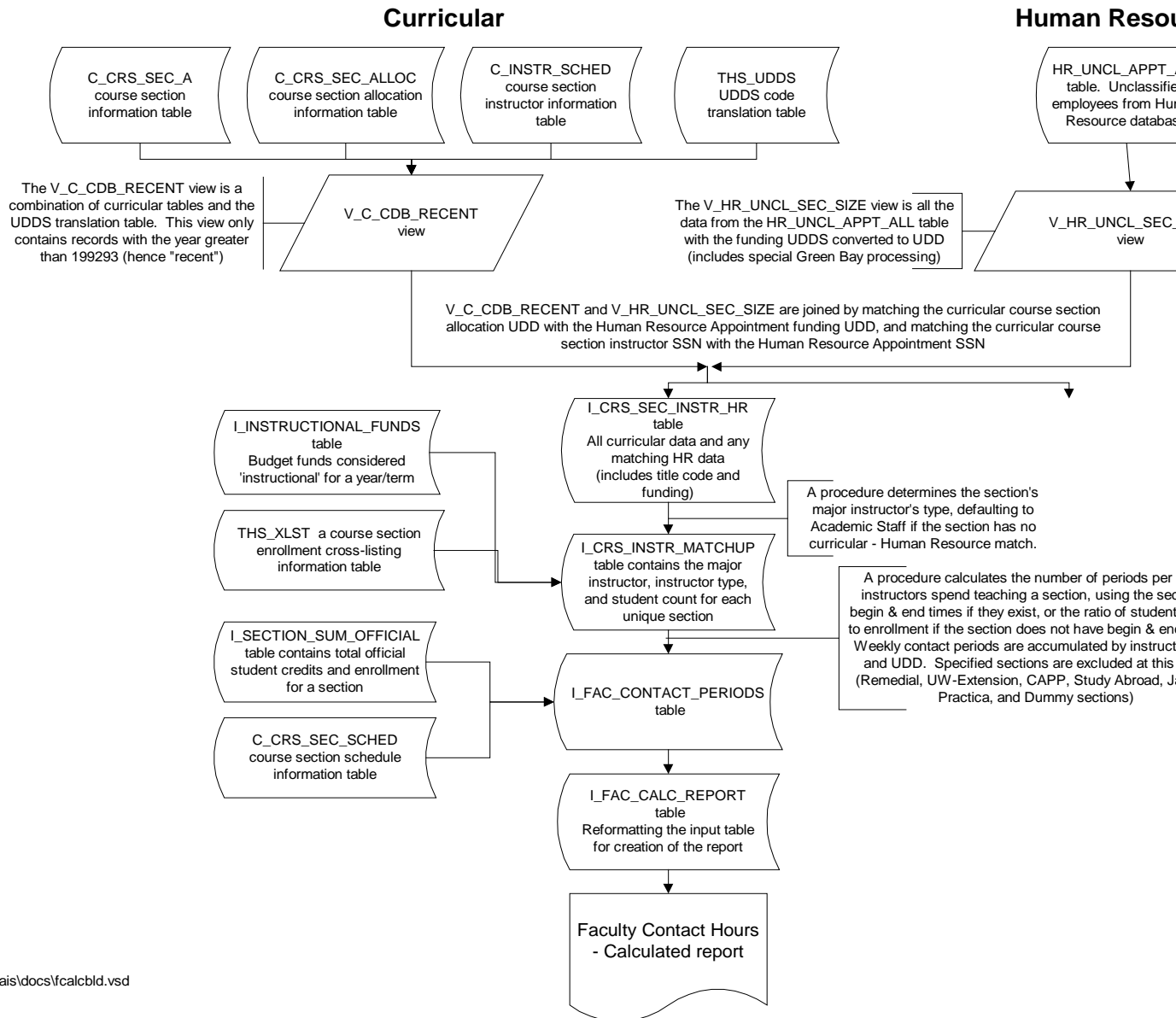
1. A January Practica section
2. A Study Abroad section
3. A UW Extension Credit Program section
4. A Cooperative Advanced Placement Program section

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.

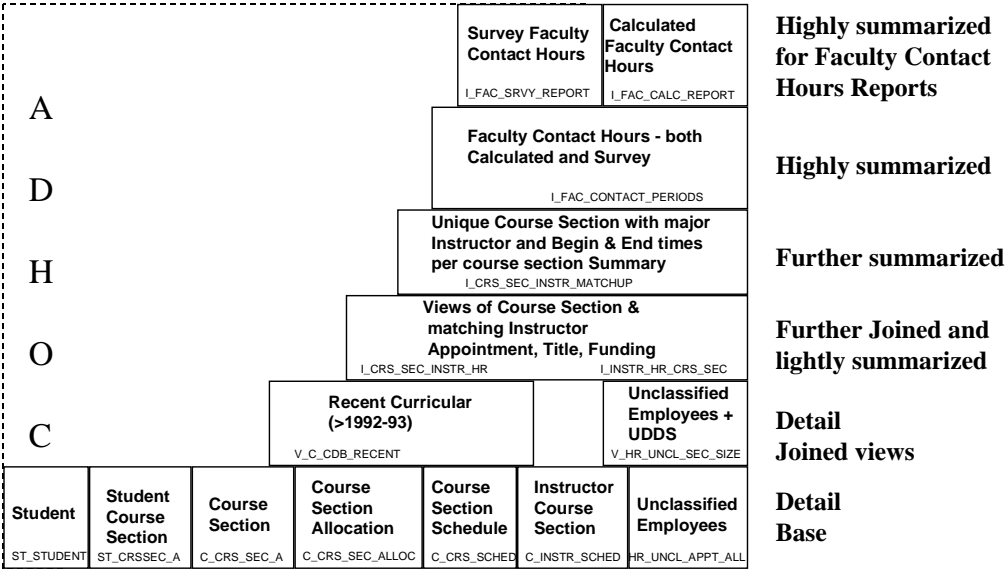
Summarizing Data

The following diagram is a high level overview of how the curricular, student, and Human Resource data are summarized to create the Calculated Faculty Contact Hours report.



Levels of Summarization

Faculty Contact Hours Data Views



g:\ois\iais\docs\car_rpt.ppt

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 the 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 unit code with no quote marks (example: A).

Division: The division must be entered as a three character code with no quote marks (example: A07).

Department: The department must be entered as a five character code with no quote marks (example: A0720).

Report Levels

The Faculty Contact Hours - Calculated Report has been broken down into several different reports with different levels of summarization.

Cluster Totals

Faculty Contact Hours data 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 parameter year.

Department Totals

Faculty Contact Hours data totaled within UDD for all units. Needs input parameter year.

Department Totals - for a Single Department

Faculty Contact Hours data totaled within UDD for a specific department. Needs input parameters year and department.

Department Totals - for a Single Division

Faculty Contact Hours data totaled within UDD for a specific division. Needs input parameters year and division.

Department Totals - for a Single Unit

Faculty Contact Hours data totaled within UDD for a specific unit. Needs input parameters year and unit.

Division Totals

Faculty Contact Hours data totaled within division for all units. Needs input parameters year.

Division Totals - for a Single Division

Faculty Contact Hours data totaled within division for a specific division.
Needs input parameters year and division.

Division Totals - for a Single Unit

Faculty Contact Hours data totaled within division for a specific unit.
Needs input parameters year and unit.

Unit Totals

Faculty Contact Hours data totaled within unit for all units. 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 parameter year.

Unit Totals - for a Single Unit

Faculty Contact Hours totaled 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 and unit.

Report Definitions

1. Cluster Summary

The level of summarization for this report is at the cluster level. This report summarizes the total and average by FTE of group instruction and individual instruction faculty contact hours which are funded by state instructional funds within the given Cluster.

2. 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.

3. 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.

4. Department Summary

The level of summarization for this report is at the department level. This report summarizes the total and average by FTE of group instruction and individual instruction faculty contact hours which are funded by state instructional funds within the given Unit/Division/Department. The department is derived from the Course Section Allocation UDD.

5. Dept. FTE - row

This row is the total FTE 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).

6. 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.

7. 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 of group instruction and individual instruction faculty contact hours which are funded by state instructional funds within the given Unit/Division. The division is derived from the Course Section Allocation UD.

8. Group Instruction - row

This row lists the total number of hours per week that faculty have contact with students and an average number of hours per FTE that faculty have contact with students per week in a group instruction section for each instructor type.

9. Individual Inst - row

This row lists the total number of hours per week in an individual instruction section that faculty have contact with students and an average number of hours per FTE that faculty have contact with students per week for each instructor type. Faculty contact hours are equal to official student credits in individual instruction sections.

10. Instructor Type - Academic Staff - column

An academic staff instructor is an instructor whose title_code does not fall under the guidelines for Legal Faculty or Graduate Assistants, or a section without a matching Human Resource employee. In order for a section to be processed under Academic Staff 1) its major instructor must have a title code that is not Legal Faculty nor Graduate Assistant on an appointment OR 2) no Human Resource match was found for that section. Academic Staff is the default instructor type.

11. Instructor Type - Assoc Prof - column

An Associate Professor is an instructor whose title_code is C30NN or C60NN. In order for a section to be processed under Associate Professor its major instructor must have one of the above title codes on an appointment.

12. Instructor Type - Asst Prof - column

An Assistant Professor is an instructor whose title_code is C40NN. In order for a section to be processed under Assistant Professor its major instructor must have the above title code on an appointment.

13. Instructor Type - Graduate Assistants - column

Graduate Assistant is an instructor whose title_code begins with a 'Y'. In order for a section to be processed under Graduate Assistants its major instructor must have a title_code beginning with a 'Y' on an appointment .

14. Instructor Type - Instructor - column

An Instructor is an instructor whose title_code is C50NN. In order for a section to be processed under Instructor its major instructor must have the above title code on an appointment.

15. Instructor Type - Legal Fac - column

The Legal Faculty column is a total and average of faculty contact hours per week of the Professor, Assoc Prof, Asst Prof, and Instructor columns.

16. Instructor Type - Professor - column

A Professor is an instructor whose title_code is C20NN. In order for a section to be processed under Professor its major instructor must have the above title code on an appointment.

17. Instructor Type - Total column

The Total column is a total and average of faculty contact hours per week of all types of instructor columns.

18. Term

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

Term	Description
S	Summer
1	Fall
W	Winter
2	Spring

19. Unit

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

20. 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.

21. Unit Summary

The level of summarization for this report is at the unit level. This report summarizes the total and average by FTE of group instruction and individual instruction faculty contact hours which are funded by state instructional funds within the given Unit.

22. Year

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

Example: "199495" for 1994-95.

How To

How to determine a section's Instructor Type

An attempt is made to match a section's major instructor to an instructor on the Human Resource database, i.e., to match the section's Instructor's SSN with the Human Resource SSN. Use the following rules to determine the instructor type:

1. If no match is found the Instructor Type defaults to 'AS' (academic staff).
2. If only one match is found the Instructor Type is derived from the instructor's Title code. For additional information see "How to derive an Instructor Type from a Title Code" on page 4.
3. If more than one match is found, a single Instructor Type is determined by using an algorithm. For additional information see "How to determine the Instructor Type for a Section with multiple Instructor - Human Resource matches" on page 5.

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.

Title Code	Instructor Type
C20NN	Professor
C30NN, C60NN	Associate Professor
C40NN	Assistant Professor
C50NN	Instructor
C20NN, C30NN, C40NN, C50NN, C60NN	Legal Faculty
Starts with 'Y'	Graduate Assistant
Any other unclassified staff title code	Academic Staff

How to determine the Instructor Type for a Section with multiple Instructor - Human Resource matches

Some primary or dependent sections are taught by more than one instructor, and the instructors may belong to different Instructor Types. The following steps are used to determine which instructor to match with a section.

The steps for determining which instructor to match with a primary or dependent section are listed in order of importance. Once a match is found, disregard the subsequent steps (for example, if a match is found using step # 2, disregard steps 3 & 4).

1. IF only one Human Resource match* is found use that instructor's human resource data regardless of the type of funding, prorated effort for credits and enrollments, and title code.
2. IF more than one Human Resource match* is found, use the match with the Human Resource funding UDD that matches the Course Allocation UDD**.
3. IF more than one Human Resource match* is found with a matching UDD, use the match with the highest prorated effort for credits and enrollments regardless of the type of funding and title code.
4. IF more than one Human Resource match* is found with a matching UDD and equal prorated effort for credits and enrollments, or prorated effort for credits and enrollments is zero for all instructors of the section, use the match with state instructional funding (fund + activity) regardless of title code.
5. IF more than one Human Resource match* is found with equal prorated effort for credits and enrollments, or prorated effort for credits and enrollments is zero for all instructors of the section, and all are funded with state instructional funds, use the match with the highest ranking title code. For more information see "How to derive an Instructor Type from a Title Code" on page 4.

* A match means a section's instructor has an SSN matches an SSN in the Human Resources database.

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 instructs a section but is not funded by state instructional funds his/her FTE is accumulated under Academic Staff, regardless of his/her title code.

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.

How to calculate Group Instruction Contact Hours

- 1) Subtract the begin time of a section from the end time of that section to get the number of minutes that the section meets. For example, a section begins at 13:15 and ends at 14:50. Convert to minutes from midnight by multiplying the beginning and ending hours by 60 and adding the minutes back, then subtract the beginning hour in minutes from the ending hour in minutes. ($14*60+50=890$), ($13*60+15=795$), $890 - 795 = 95$ minutes.
- 2) Divide the number of minutes by 50 minutes per period (standardized for all campuses) to get the number of periods per day that the section meets (rounded to the nearest tenth): $95\text{min}/50\text{min} = 1.9$ periods per day .
- 3) Multiply the number of periods per day that the section meets by the number of days in a week that the section meets to get the number of periods per week that the section meets. ($1.9 \text{ periods/day} * 2 \text{ days/week} = 3.8 \text{ periods/week}$)
- 4) Multiply the number of periods per week by the ratio of the number of weeks the section meets to the semester duration (the number of weeks in a semester at that campus) to prorate the periods over an entire semester.

If there are no begin or end times for a section, contact hours are computed as the quotient of student official credits produced by the section and the enrollment in the section (student official credit divided by student official enrollment).

How to calculate Individual Instruction Contact Hours

The student official credits in a section are used as the faculty contact hours for the individual instruction sections.

How to calculate Faculty Contact Hours per FTE

Accumulate the Group Instruction Contact Hours and the Individual Instruction Contact Hours under the specific instructor type, and then divide them by the Instructor Type's Total FTE for that level of summarization.

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 zero-filled, then equally distribute the FTE among the sections.

Example:

Instructor FTE = 0.8	Section Taught	% of Effort	FTE for the Sec
	001	10	0.16 ($0.8*10/50$)
	002	20	0.32 ($0.8*20/50$)
	003	<u>20</u>	<u>0.32</u> ($0.8*20/50$)
Total =		50	0.80

Detail Data Elements Needed:

Table: UWSA.C_CRS_SEC

YEAR
TERM
UNIT
DIVISION
CAC
COURSE
SECTION
XLIST_IND
INSTR_TYPE (type of instruction on the report)

Table: UWSA.C_CRS_SEC_ALLOC

DDS
SEC_ALLOC_COEFF

Table: UWSA.C_CRS_INSTR_SCHED

INSTRUCTOR_SSN

Table: UWSA.THS_XLST

UNIT
DIVISION
CAC
COURSE
SECTION
ENRL_CARRY_UNIT
ENRL_CARRY_DIVISION
ENRL_CARRY_CAC
ENRL_CARRY_COURSE
ENRL_CARRY_SECTION

Table: UWSA.HR_UNCL_APPT (from October Payroll)

INSTRUCTOR_SSN
APPT_FUNDING_UDD
FUND

ACTIVITY
TITLE_CODE
FTE_SPLIT

Table: UWSA.THS_UDDS

UDDS_NAME
UDDS_ABBREV

Table: UWSA.ST_CRSSEC

Count of students
CREDITS_BY_SEC

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.

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 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, 0.50 for a ½ time employee, etc.

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 than 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 fund numbers 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.

Title Code	Instructor Type
C20NN	Professor

C30NN, C60NN	Associate Professor
C40NN	Assistant Professor
C50NN	Instructor
C20NN, C30NN, C40NN, C50NN, C60NN	Legal Faculty
Starts with 'Y'	Graduate Assistant
Any other unclassified staff title code	Academic Staff

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:

Title Code	Instructor Type
C20NN	Professor
C30NN, C60NN	Associate Professor
C40NN	Assistant Professor
C50NN	Instructor

Major Instructor

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.

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 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 Official Credits

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

Study Abroad

Course sections where a student is enrolled 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

The 6 digit academic year for which the report is printed. ex. 199596

Index

A

Academic Staff 2, 4–5, 4, 5
Assistant Professor 2, 4
Associate Professor 2, 4

C

Cluster 1, 5
cross-listed 2

D

Department 1, 5
Division 1

F

FTE 5–2, 5–2

G

Graduate Assistant 2, 4
group instruction 5, 6

I

instructional funding 3, 4–5, 4–5
Instructor 4–1, 4–1
Instructor Type 4–6, 4–6
Instructors 1, 4

L

Legal Faculty 2, 4

P

Professor 2, 4

S

student level 5

T

Title Code 2, 4–5, 4–5
title_code 2, 4–5, 4–5, 4–5

U

Unit 1