U-M Data Warehouse

Legacy College Resources Analysis System (CRAS) Data Dictionary

Michigan Administrative Information Services
University of Michigan
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Legacy CRAS Tables

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Legacy CRAS Tables Overview Diagram

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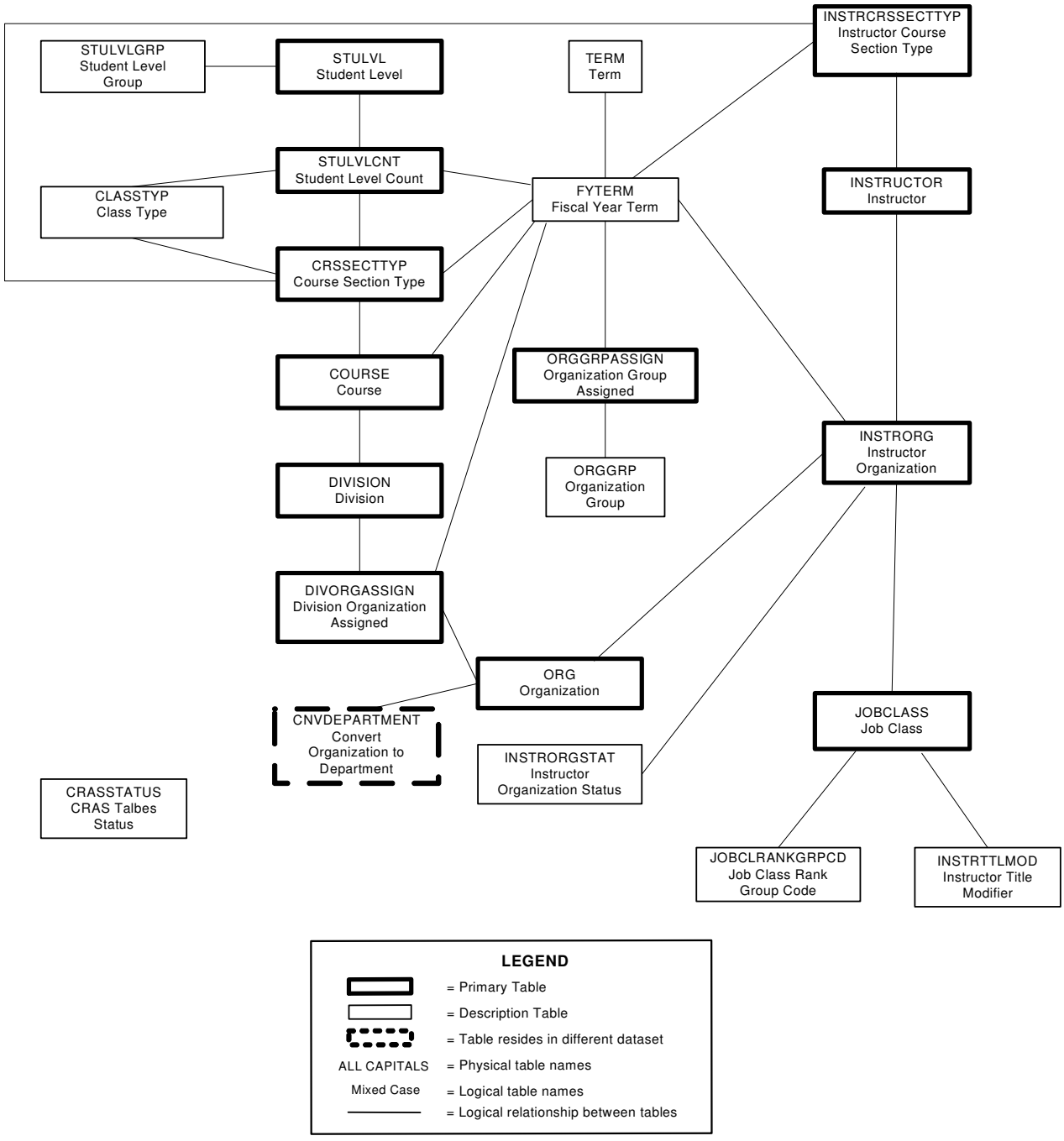
The Legacy CRAS Tables Overview Diagram illustrates the logical relationships among the Legacy CRAS tables. A logical link (solid or dotted line) between two tables indicates that there is a direct relationship between the two tables. Physically, any tables with a common element can be joined. However, two tables with common elements may not necessarily have logical links to one another. Joining tables without logical links may produce undesired results; a thorough understanding of the data is needed to guarantee results.



Legacy CRAS Tables Description

The Legacy CRAS Tables Description provides the following information for each table in the U-M Data Warehouse Legacy CRAS Data Set:

Physical Table Name: Name for the table you can use in SQL queries.
Logical Table Name: Descriptive name of the table.
Data Set Locations: The names of the data sets in which the table resides.
Table Description: Description of the table.

The tables are ordered alphabetically by table physical name.

Physical Table Name	*Logical Table Name*	*Data Set Locations*	*Table Description*
ClassTyp	Class Type	CRAS	Provides codes and descriptions of all seven modes of instruction offered at the University.
CnvDepartment	Convert Legacy Org to Department	CHRTFLD1	Converts legacy org codes to department identification numbers (ID's).
Course	Course	CRAS	A course is an organized set of activities pertaining to instruction in a particular subject matter, conducted during a given period of time. This table contains data elements that describe the course overall, for example, the number of credits for which a course is offered.
CrsSectTyp	Course Section Type	CRAS	The attributes associated with an individual section and class type within a course.
Division	Division	CRAS	A code and description grouping an aggregate of courses by instructional area as designated by the Registrar.
DivOrgAssign	Division Organization Assignment	CRAS	The association of an instructional area with a University organization.
FYTerm	Fiscal Year Term	CRAS	Describes the calendar and fiscal years in which a particular term falls.
InstCrsSectTyp	Instructor Course Section Type	CRAS	Attributes that describe an individual's teaching assignment in a particular section and class type. The table includes identification of the appointment that pays for the individual to teach that portion of the course.
InstrOrg	Instructor Organization	CRAS	Describes the appointment of an individual in a particular organization for a given term.
InstOrgStat	Instructor Organization Status	CRAS	A code and description used to indicate if an individual is on sabbatical leave or retirement furlough during the given term.
InstTtlMod	Instructor Title Modifier	CRAS	A code and description that qualifies a job title and identifies the instructor as a member of the University's supplemental instructional staff. Modifiers include "visiting", "adjunct", and "clinical".

Physical Table Name	*Logical Table Name*	*Data Set Locations*	*Table Description*
Instructor	Instructor	CRAS	The name and social security number of an individual who has an affiliation with the University, usually as the result of having an active paid or unpaid appointment, which may or may not be under a teaching title and may or may not include teaching responsibilities for the given term. Only individuals with selected job classification titles are included in CRAS.
JobClass	Job Class	CRAS	Characteristics of occupations such as the Human Resources-assigned code number, job title description and modifier code, and a code for grouping by instructional staff level.
JobClRankGrp	Job Class Rank Group	CRAS	A code and description that classifies a job title as one of the five faculty ranks, a graduate student teaching assistant, or a non-teaching position.
Org	Organization	CRAS	The code and name for a University-designated budgetary unit. An organization may or may not be one in which courses are offered, and may or may not have teaching staff appointed to it.
OrgGrp	Organization Group	CRAS	The code and name for combining budgetary units into a larger entity, such as a school or college.
OrgGrpAssign	Organization Group Assignment	CRAS	The linking of an organization to a particular organization group for a given term.
StuLvl	Student Level	CRAS	The code and description for a student's degree level, or in the case of undergraduates, academic progress toward a degree or certificate.
StuLvlCnt	Student Level Count	CRAS	The enrollment in each section, instructional mode and student level. That is, one record is associated with each student level for each class section and class type.
StuLvlGrp	Student Level Group	CRAS	A grouping of student levels into undergraduate or graduate for reporting purposes.
Term	Term	CRAS	The code and description for one of five major time divisions of the University's academic calendar, during which courses are offered and individuals are employed.

Legacy CRAS Primary Tables Diagram

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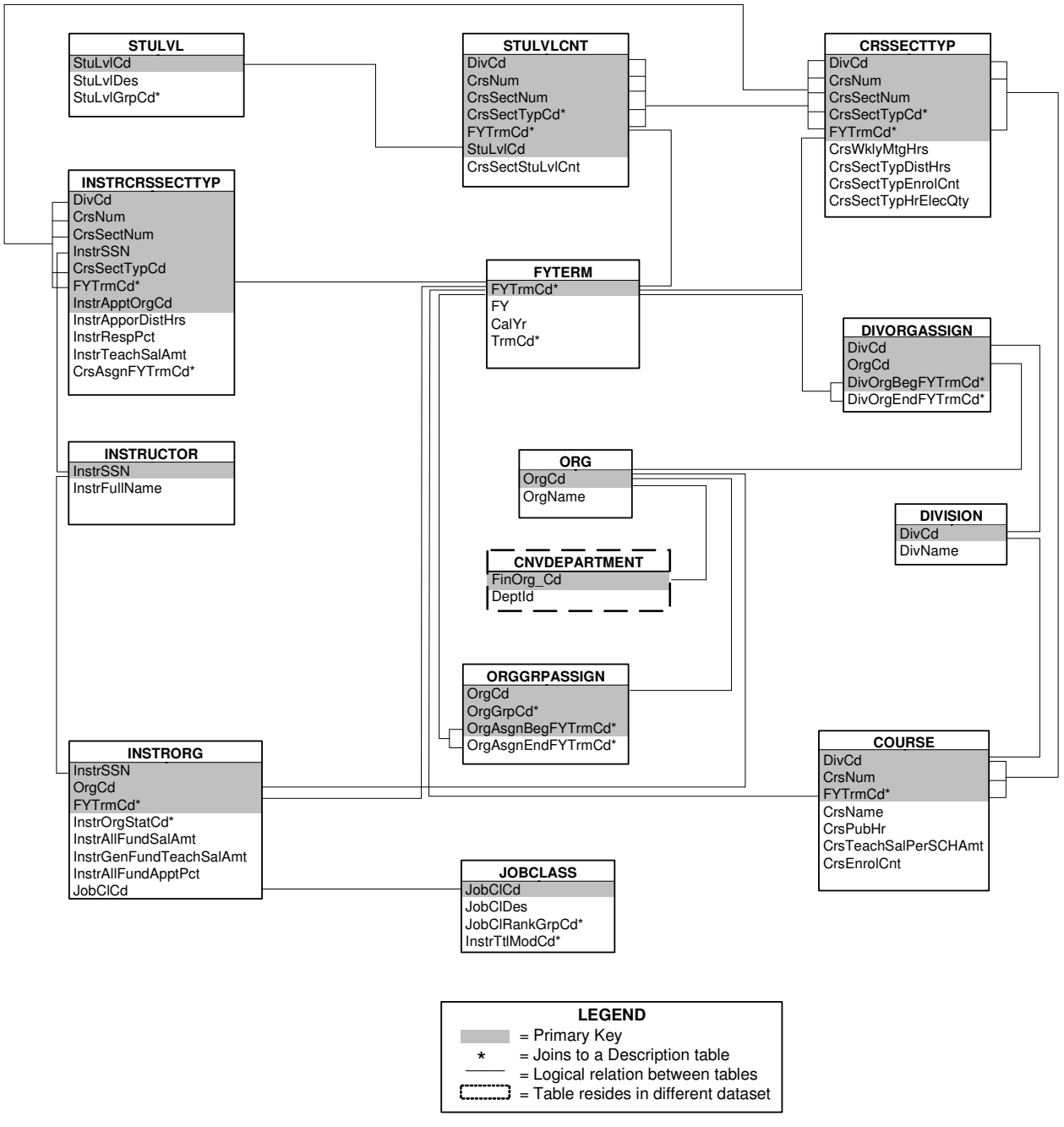
The Legacy CRAS Primary Tables Diagram illustrates the *logical* relationships among the Legacy CRAS Primary Tables. A logical link (connecting line) between two tables indicates that there is a direct data relationship between the two tables. *Physically*, any tables with a common element can be joined. However, two tables with common elements may not necessarily have logical links to one another. Joining tables without logical links may produce undesired results; a thorough understanding of the data is needed to guarantee results.

Elements on the Legacy CRAS Primary Tables Diagram that you can use to join one or more description tables are indicated with an asterisk (*). Refer to page 5 for the Legacy CRAS Description Tables Diagram.



Legacy CRAS Description Tables Diagram

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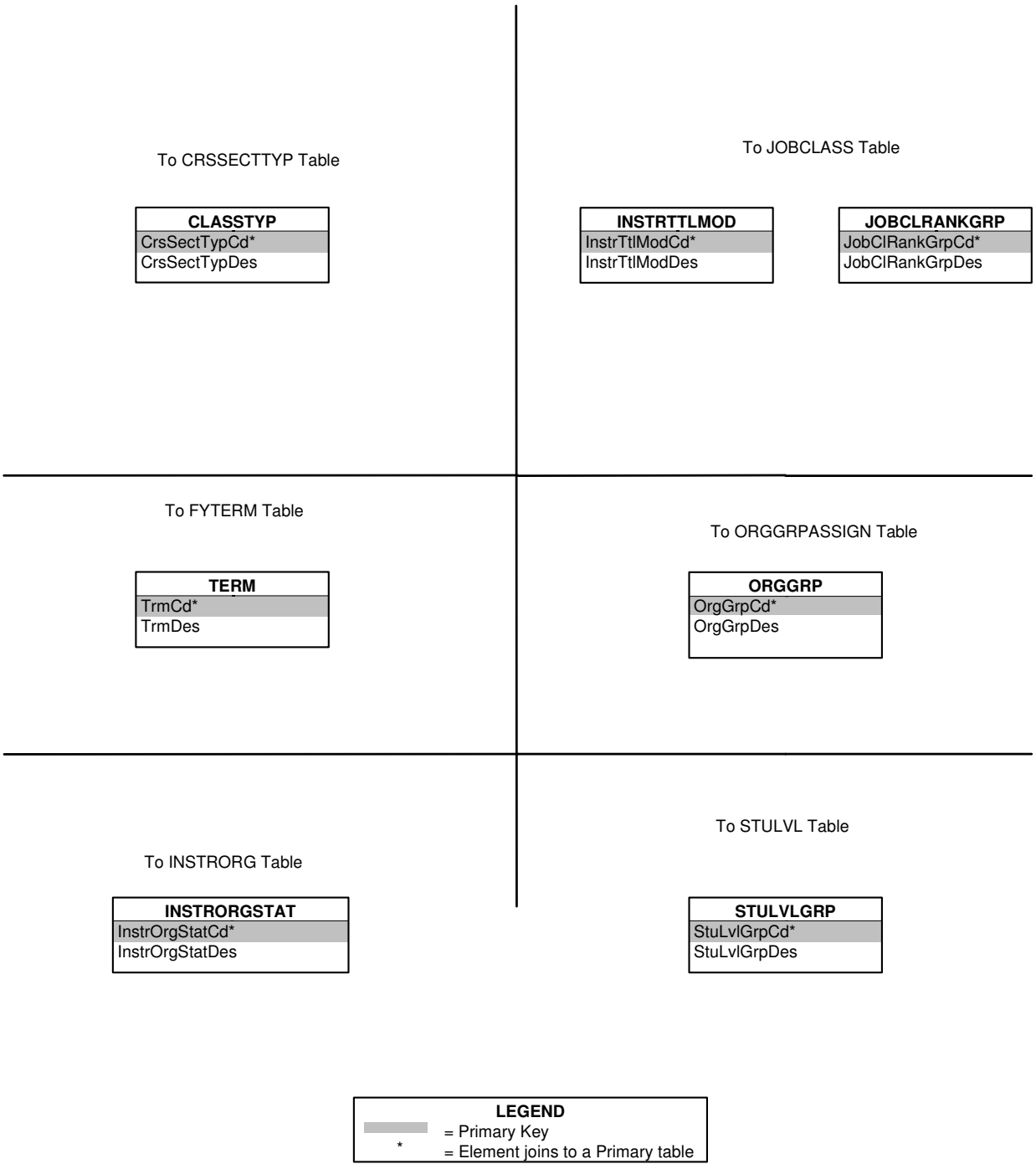
The Legacy CRAS Description Tables diagram illustrates the description tables associated with the Legacy CRAS data set. You can use a description table alone, with other description tables, and with the primary Legacy CRAS tables. To connect a description table to a primary table, join on the common element.



Legacy CRAS Data Element Dictionary

The Legacy CRAS Data Element Dictionary contains all the elements found in the U-M Data Warehouse Legacy CRAS Tables, ordered alphabetically by element name. Here is a description of the information that the dictionary provides for each element:

Physical Element Name: Name for the element you can use in SQL queries.

Logical Element Name: Descriptive name of the element.

Format Type: Type of value of the element (for example: character, number, or date). *Note:* If the format type for an element is character or date, you must enclose the variable value in single quotes when entering queries.

Format Length: Total length of the element. For data elements in the format "number,number", the first number represents the total length of the element. The second number represents the number of digits to the right of the decimal.

Data Sets: The names of the data sets that contain the element.

Table Locations: The names of the tables in which the element is located.

Security Code: The level of security imposed on the element. Values are:

- P Public data: Data with no access restriction that may be released to the general public.
- R Private/Confidential data: Data available to University employees who need to access these data to perform their official University duties. Unless otherwise noted, all institutional data is designated as Private/Confidential.
- S Sensitive data: Data available only to University employees who have specific authorization for access. Never release sensitive data in a manner that enables identifying data element values with a specific person or persons.

Element Definition: Description of the element.

Examples of Valid Values: Either the specific codes that are valid for the element, or samples of the kind of values for the element.

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
CalYr	Calendar Year	Character	4	CRAS	FYTerm	R	A four-digit code that identifies the calendar year in the format YYYY.	1990; 1987; 1992

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
CrsAsgnFYTrmCd	Course Assigned Fiscal Year Term Code	Character	5	CRAS	InstrCrsSectTyp	R	A code which assigns a half-term or full-term course's instructional activity to the full-term instructional appointment that pays for the teaching. The format is YYYYT where the first four digits represent the fiscal year of the full-term appointment period and the last digit identifies the term: 2=Fall; 3=Winter; 5=Spring-Summer. See FYTrmCd and TrmCd for further explanation of academic calendar time divisions used in CRAS. For example, 19935 matches both spring-half and summer-half courses taught in calendar year 1993 to spring-summer (May-Aug) appointments. This data element joins with FYTrmCd in InstrOrg Table.	19935
CrsEnrolCnt	Course Enrollment Count	Numeric	5	CRAS	Course	R	The total number of students enrolled for credit in a course.	52; 187
CrsName	Course Name	Character	19	CRAS	Course	P	The name of an instructional course (assigned by the division offering the course and contained in the University Course Database).	COLLEGE WRITING
CrsNum	Course Number	Character	3	CRAS	Course CrsSectTyp InstrCrsSectTyp StuLvlCnt	P	A number which, in conjunction with a division number, uniquely identifies an instructional course at the University.	125; 105; 501
CrsPubHrs	Course Published Hours	Character	4	CRAS	Course	R	The stated credit hours for which a course is offered as designated by the teaching division and contained in the University Course Database (UCDB).	1; 3; 1-4

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
CrsSectNum	Course Section Number	Character	3	CRAS	CrsSectTyp InstrCrsSectTyp StuLvlCnt	R	A number, used in conjunction with a division number and course number to uniquely identify a specific section of an instructional course offered by the University.	001; 002
CrsSectStuLvlCnt	Course Section Student Level Count	Numeric	6	CRAS	StuLvlCnt	R	The total number of students of a particular level enrolled for credit in a section and class type of a course.	10; 20
CrsSectTypCd	Course Section Type Code	Character	4	CRAS	ClassTyp CrsSectTyp InstrCrsSectTyp StuLvlCnt	R	The code for the mode of instruction of a particular meeting of a section of a course. The University uses seven codes.	LEC=LECTURE; REC=RECITATION; DIS=DISCUSSION; SEM=SEMINAR; LAB=LABORATORY; PSI=PERSONALIZED SYSTEM OF INSTRUCTION; IND=INDIVIDUALIZED INSTRUCTION
CrsSectTypDes	Course Section Type Description	Character	35	CRAS	ClassTyp	R	The description for the mode of instruction of a particular meeting of a section of a course.	LECTURE; RECITATION; DISCUSSION; SEMINAR; LABORATORY; PERSONALIZED SYSTEM OF INSTRUCTION; INDIVIDUALIZED INSTRUCTION
CrsSectTypDistHrs	Course Section Type Distributed Hours	Numeric	6,2	CRAS	CrsSectTyp	R	The portion of the total course credit hours assigned to sections of this class type within a course, using the Presidents Council, State Universities of Michigan (PCSUM) methodology (see Appendix A).	1.00; 2.00
CrsSectTypEnrolCnt	Course Section Type Enrollment Count	Numeric	6	CRAS	CrsSectTyp	R	The total number of students enrolled for credit in a section and class type of a course.	140; 200; 5

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
CrsSectTypHrElecQty	Course Section Type Hours Elected Quantity	Numeric	6	CRAS	CrsSectTyp	R	The total number of credit hours for a course elected by all students enrolled in a section and class type. For example, "420" would represent 140 students in a lecture and registered for 3 course credit hours each.	420
CrsTeachSalPerSCHAmt	Course Teaching Salary Per Student Credit Hour Amount	Numeric	7	CRAS	Course	R	The direct instructional salary cost per student credit hour in a course, calculated using the Presidents Council, State Universities of Michigan (PCSUM) methodology (see Appendix A).	259; 616; 1035
CrsWklyMtgHrs	Course Average Weekly Meeting Hours	Numeric	3,1	CRAS	CrsSectTyp	R	The scheduled class instructional contact hours expressed as average weekly meeting hours over a 14-week term (derived data from the University Course Database). For example, "3.0" meets 3 hours per week for a full-term, or 6 hours a week for half a term. See "Appendix B: Detailed Description of Selected Elements" for more information.	3.0; 4.0
DeptId	Department Identification Code	Character	10	CHRTFLD1	CnvDepartment	R	A code that identifies each academic or administrative unit that has programmatic, operational and fiscal (including budgetary) responsibility.	184500 = Physics Department; 170000 = College of Lit, Science & Arts
DivCd	Division Code	Character	3	CRAS	Course CrsSectTyp Division DivOrgAssign InstrCrsSectTyp StuLvlCnt	P	A code representing an aggregate of courses by instructional area as designated by the Registrar. Instructional areas usually represent distinct subject matter that is reflected in the content of courses taught and in the area of scholarship of staff providing the instruction. *Also known as "division number".*	428=Math; 361=English

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
DivName	Division Name	Character	9	CRAS	Division	P	The name of an aggregate of courses by instructional area as designated by the Registrar.	MATH; ENGLISH
DivOrgBegFYTrmCd	Division/Organization Begin Fiscal Year Term Code	Character	5	CRAS	DivOrgAssign	R	The fiscal year and term in which a division's association with a given University organization begins. The format is YYYYT where the first four digits represent the fiscal year and the last digit represents the term (1=Summer, 2=Fall, 3=Winter, 4=Spring, 5=Spring-Summer) For example, "19852" represents Fall 1984. *The assignment of a division code (DivCd) to an OrgCd is determined by the Office of Academic Planning and Analysis.* A default value of "00000" is possible and represents that the beginning term is unknown.	19852
DivOrgEndFYTrmCd	Division/Organization End Fiscal Year Term Code	Character	5	CRAS	DivOrgAssign	R	The fiscal year and term in which the given division was last affiliated with a particular University organization. The format is YYYYT where the first four digits represent the fiscal year and the last digit represents the term (1=Summer, 2=Fall, 3=Winter, 4=Spring, 5=Spring-Summer). For example, "19852" represents Fall 1984. *The assignment of a division code (DivCd) to an OrgCd is determined by the Office of Academic Planning and Analysis.* A default value of "99999" is possible and represents that the ending term is unknown.	19842

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
FinOrg_Cd	Legacy Organization Code	Character	4	CHRTFLD1	CnvDepartment	R	A code that identifies each academic or administrative unit within the University.	1000 = Office of the President; 1520 = Museum of Art; 1865 = Romance Languages
FY	Fiscal Year	Character	4	CRAS	FYTerm	R	The U-M fiscal year in the format YYYY. The U-M fiscal year runs from July through June, and the date of the end of the fiscal year determines the code value of this element. For example, "1994" represents the fiscal year beginning July 1, 1993, and ending June 30, 1994.	1992; 1994
FYTrmCd	Fiscal Year Term Code	Character	5	CRAS	Course CrsSectTyp FYTerm InstrCrsSectTyp InstrOrg StuLvlCnt	R	The four-digit U-M fiscal year plus a single-digit numeric code which indicates a given term. Term codes are represented by 1=Summer, 2=Fall, 3=Winter, 4=Spring, 5=Spring-Summer. For example, Fall term 1993 occurs in fiscal year 1993-94 and, therefore, is coded as "19942." In the InstOrg Table, FYTrmCd represents appointments calculated on a full-term basis as follows: Fall (Sept-Dec), Winter (Jan-Apr), Spring-Summer (May-Aug). Half-terms are converted to the full-term equivalent. For joins between the InstOrg Table and the InstrCrsSectTyp Table, FYTrmCd in InstOrg is joined to CrsAsgnFYTrmCd in InstrCrsSectType.	19851

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
InstrAllFundApptPct	Instructor All Funds Appointment Percent	Numeric	4,2	CRAS	InstrOrg	R	The FTE (full-time-equivalent) appointment fraction for an individual in a given budgeted unit for an academic term. See “Appendix B: Detailed Description of Selected Elements” for more information.	1.00; .50; .33
InstrAllFundSalAmt	Instructor All Funds Salary Amount	Numeric	5	CRAS	InstrOrg	R	An individual's total term salary from all appointments in a given unit regardless of title or funding source. For example, "9000" could be $5,000 paid from a General Fund account + $4,000 paid from a sponsored research account.	9000
InstrApporDistHrs	Instructor Apportioned Distributed Hours	Numeric	7,2	CRAS	InstrCrsSectTyp	R	The portion of the total course credit hours attributed to the particular instructor teaching a section of a course, using the Presidents Council, State Universities of Michigan (PCSUM) methodology (see Appendix A). For example, "1.50" could be an amount assigned to each of 2 instructors sharing a 3 credit seminar equally.	1.50; 4.00
InstrApptOrgCd	Instructor Appointing Organization Code	Character	4	CRAS	InstrCrsSectTyp	R	The organizational unit code for a unit in which an instructional staff member holds an appointment and which is associated with a course for which the individual has teaching responsibility. In general, this can be thought of as the unit which is paying the salary of an individual who is teaching a particular course. See “Appendix B: Detailed Description of Selected Elements” for more information.	1830=Dept of Math; 1755=Dept of English

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
InstrFullName	Instructor Full Name	Character	20	CRAS	Instructor	R	The name of an individual who has an affiliation with the University, usually as the result of an active paid or unpaid appointment. The individual may or may not have teaching responsibilities in a given term. The names and social security numbers of individuals who do have teaching responsibilities are supplied to the University Course Database (UCDB) by units offering the courses being taught. The content of this field is an individual's name as it is entered in the Human Resources Database and is in the format: Last name, First name, Middle initial,	DOE,JOHN,Q,
InstrGenFundTeachSalAmt	Instructor General Fund Teaching Salary Amount	Numeric	5	CRAS	InstrOrg	R	An individual's salary amount for a term from appointments with a teaching title paid from the General Fund of a given unit.	25000
InstrOrgStatCd	Instructor Organization Status Code	Character	1	CRAS	InstrOrg InstrOrgStat	R	A code established by the Human Resources Office to represent the status of an appointment for an individual who is on sabbatical leave or retirement furlough during the given term.	S=Sabbatical; R=Retirement Furlough; N=N/A (Not Applicable)
InstrOrgStatDes	Instructor Organization Status Description	Character	20	CRAS	InstrOrgStat	R	A description of a code established by the Human Resources Office to represent the status of an appointment for an individual who is on sabbatical leave or retirement furlough during the given term.	Sabbatical; Retirement Furlough; N/A (Not Applicable)

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
InstrRespPct	Instructor Responsibility Percent	Numeric	3	CRAS	InstrCrsSectTyp	R	The percentage of an individual's responsibility for the instruction in a section of a course within a particular class type. (This information is entered into the University Course Database (UCDB) through unit-supplied information on the Type 4 Form.) If an individual is solely responsible for teaching a particular section and class type, the percent responsibility is 100%. In cases of shared instruction in a given section, each individual is credited with a portion of the responsibility such that the sum of the percentages for all individuals involved is 100%.	100; 50

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
InstrSSN	Instructor Social Security Number	Character	9	CRAS	InstrCrsSectTyp InstrOrg Instructor	S	The social security number of an individual who has teaching responsibility for a course. The source for this is information supplied to the University Course Database (UCDB) by the unit offering the course. When the unit-supplied name and/or instructor SSN does not identify an individual with an active appointment for the term, a unique number is created and assigned by the Office of Academic Planning and Analysis. Prior to the Winter 1994 term, the Office of Academic Planning and Analysis (OAPA)-assigned numbers follow the format of three leading zeros, a two digit sequential number for the department, followed by the four digit Organization Code. For Winter 1994 and any term thereafter, the OAPA-assigned numbers follow the format of three leading nines, a two digit sequential number for the department, followed by the four digit Organization Code of the unit offering the course.	123789456; 000011830; 999011830
InstrTeachSalAmt	Instructor Teaching Salary Amount	Numeric	5	CRAS	InstrCrsSectTyp	R	The amount of the instructional staff member's salary assigned to the teaching of a particular section of a course, calculated using the Presidents Council, State Universities of Michigan (PCSUM) methodology (see Appendix A).	0; 10,000; 65,000

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
InstrTtlModCd	Instructor Title Modifier Code	Character	1	CRAS	InstrTtlMod JobClass	R	A code established by the Human Resources Office that represents one of the following modifiers of an instructional staff member's appointment title: visiting, adjunct, clinical. When used with a teaching title, these modifiers represent faculty who are considered supplemental instructional staff.	V=Visiting; A=Adjunct; C=Clinical
InstrTtlModDes	Instructor Title Modifier Description	Character	10	CRAS	InstrTtlMod	R	A description of codes established by the Human Resources Office that modify an instructional staff member's appointment title such as "visiting" professor, "adjunct" instructor, "clinical" assistant professor. These modifiers identify faculty who are considered supplemental instructional staff.	VISITING; ADJUNCT; CLINICAL
JobClCd	Job Class Code	Character	5	CRAS	InstrOrg JobClass	R	A code established by the Human Resources Office to represent an occupation category. When individuals have more than one appointment with different titles in the same unit, the code assigned is determined by the appointment with the larger appointment fraction. If the appointment fractions are equal and one of the appointments is under a teaching title, that appointment determines the code.	20100= Professor; 20500= Grad Stu Teach Asst

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
JobClDes	Job Class Description	Character	25	CRAS	JobClass	R	A description of an occupation category established by the Human Resources Office *[a.k.a., job class title]*. In the CRAS system, the last three characters of the fixed-length Human Resources description are replaced by the characters "CHM" when an individual has an appointment as a departmental chair.	PROFESSOR; ASST PROFESSOR; GRAD STU TEACH ASST
JobClRankGrpCd	Job Class Rank Group Code	Character	1	CRAS	JobClass JobClassRankGrp	R	A code assigned by the Office of Academic Planning and Analysis (OAPA) that groups job class titles into seven categories representing the various faculty ranks (for example, professor, associate professor, and so on) or other levels of academic-related appointments (for example, GSTA or non-teaching titles). Faculty groupings are based on the level of the title regardless of title modifiers that differentiate regular faculty from supplemental faculty. When the job class title is initially missing because the person responsible for teaching a course is unknown or the person is known but does not have an active appointment in the given term, the OAPA assigns a group code of 7.	1=Professor; 2=Assoc Prof; 3=Asst Prof; 4=Instructor; 5=Lecturer; 6=GSTA; 7=Other

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
JobClRankGrpDes	Job Class Rank Group Description	Character	10	CRAS	JobClassRankGrp	R	A description of the code assigned by the Office of Academic Planning and Analysis that groups job class titles into seven categories representing the various faculty ranks (for example, professor, associate professor, and so on) or other levels of academic-related appointments (for example, GSTA or non-teaching titles).	PROF; ASSOC PROF; ASST PROF; INSTR; LEC; GSTA; OTHER
OrgAsgnBegFYTrmCd	Organization Assigned Begin Fiscal Year Term Code	Character	5	CRAS	OrgGrpAssign	R	The fiscal year and term in which the given organization was first assigned to a particular organization group. The format is YYYYT, where the first four digits represent the fiscal year and the last digit represents the term (1=Summer, 2=Fall, 3=Winter, 4=Spring, 5=Spring-Summer). A default value of "00000" is possible and represents that the beginning term is unknown.	19852
OrgAsgnEndFYTrmCd	Organization Assigned End Fiscal Year Term Cd	Character	5	CRAS	OrgGrpAssign	R	The fiscal year and term in which the given organization was last affiliated with a particular organization group. The format is YYYYT, where the first four digits represent the fiscal year and the last digit represents the term (1=Summer, 2=Fall, 3=Winter, 4=Spring, 5=Spring-Summer). A default value of "99999" is possible and represents that the ending term is unknown.	19841

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
OrgCd	Organization Code	Character	4	CRAS	DivOrgAssign InstrOrg Org OrgGrpAssign	R	A code used to identify a University-designated budgetary unit, which may be academic or administrative. Depending upon the table that contains the data element, the unit identified may represent the unit appointing the instructor (InstrOrg Table), or the unit offering the course (DivOrgAssign Table). In the OrgGrpAssign Table, OrgCd refers to the appointing unit when it is joined to the InstrOrg Table; however, OrgCd refers to the teaching unit when it is joined to the DivOrgAssign Table.	1705=LSA Dean's Office; 1520=Museum of Art; 1000=Office of the President
OrgGrpCd	Organization Group Code	Character	2	CRAS	OrgGrp OrgGrpAssign	R	A code used to group OrgCd (organization codes) for reporting purposes. Generally used to group units into schools, colleges, administrative areas, and vice presidential areas.	I=Office of VP Research; &=Institute for Social Research; E=School of Education; 28=School of Art
OrgGrpDes	Organization Group Description	Character	60	CRAS	OrgGrp	R	A description of the code used to group OrgCd (organization codes) for reporting purposes. The code is generally used to group units into schools, colleges, administrative areas, and vice presidential areas.	OFFICE OF VP RESEARCH; INSTITUTE FOR SOCIAL RESEARCH; SCHOOL OF EDUCATION; SCHOOL OF ART
OrgName	Organization Name	Character	32	CRAS	Org	R	The full name of a University-designated budgetary unit, which may be academic or administrative. See OrgCd for further explanation of the meaning of this element.	DEPARTMENT OF MATHEMATICS; SCHOOL OF NURSING

Legacy CRAS Data Element Dictionary

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
StuLvlCd	Student Level Code	Character	3	CRAS	StuLvl StuLvlCnt	R	A code representing a set (grouping) of Registrar's Student Degree Progression categories. Student Degree Progression categories describe the degree level and progress toward a degree or certificate by a student in a specific academic program. Degree Progression categories are grouped as follows: LOW: freshmen, sophomore, and undergraduate NCFD (Not Candidate for Degree) students. UPP: junior and senior students. PHD: intermediate, pre-candidate, candidate, and post-candidate students. MAS: masters and graduate NCFD students. LAW: first professional and NCFD Law students. G-P: first professional and NCFD students in Medicine, Dentistry, and Pharmacy. SPE: all other Degree Progression categories not included in other student-level codes (primarily students pursuing Rackham certificates).	LOW=Lower; UPP=Upper; PHD=Doctoral; MAS=Masters; LAW=Law; G-P=Graduate-professional; SPE= Special
StuLvlDes	Student Level Description	Character	15	CRAS	StuLvl	R	A description of the code representing a set (grouping) of Registrar's Student Degree Progression categories. Student Degree Progression categories describe the degree level and progress toward a degree or certificate by a student in a specific academic program.	LOWER; UPPER; DOCTORAL; MASTERS; LAW; SPECIAL; GRADUATE-PROFESSIONAL

Physical Element Name	*Logical Element Name*	*Format Type*	*Format Length*	*Data Sets*	*Table Locations*	*Security Code*	*Element Definition*	*Examples of Valid Values*
StuLvlGrpCd	Student Level Group Code	Character	2	CRAS	StuLvl StuLvlGrp	R	A code used to combine student levels for reporting purposes. Student levels are groupings of Registrar's Student Degree Progression categories. Student levels are grouped as follows: UG: Lower and upper undergraduate students; GR: Masters, doctoral, law, graduate-professional, and special students.	UG=Undergraduate students; GR=Masters, doctoral, special, and graduate-professional students.
StuLvlGrpDes	Student Level Group Code Description	Character	15	CRAS	StuLvlGrp	R	A description of the code used to combine student levels for reporting purposes.	UNDERGRADUATE; GRADUATE
TrmCd	Term Code	Character	2	CRAS	FYTerm Term	R	A code representing the major time divisions of the University's academic calendar. For courses, there are five time divisions determined by the day classes begin and end. For appointments, there are three time divisions determined by the following beginning and ending dates: • Sept. 1–Dec. 31, Fall term • Jan. 1–April 30, Winter term • May 1–Aug. 31, Spring-Summer term.	FA=Fall ; WI=Winter; SP=Spring; SS=Spring/ Summer; SU=Summer
TrmDes	Term Description	Character	15	CRAS	Term	R	The description of the code representing the major time divisions of the University's academic calendar.	FALL; WINTER; SPRING; SPRING/SUMMER; SUMMER

Appendix A: PCSUM Course Credit Hour and Instructional Salary Costing Methodology

8/05

Presidents Council, State Universities of Michigan (PCSUM)

The public universities in Michigan are affiliated through the Presidents Council, State Universities of Michigan (PCSUM), a voluntary coordinating body. Agreements forged through PCSUM govern much of our State reporting requirements. The State requires the use of PCSUM methodology when universities report to it regarding course credit distribution and related instructional costs. Consequently, this methodology guided aspects of CRAS design.

In general, the PCSUM methodology consists of four steps:

STEP 1—Distribution of course credit hours among the various sections of a course based on class type and weekly meeting hours, and further apportionment of the distributed course credit hours among instructional staff when the teaching responsibility for a section is shared.

STEP 2—Determination that the amount of an instructional staff member's salary included in the instructional costs for a particular term comes from dollars paid by the General Fund (GF) on an appointment with an instructional title (professor, associate professor, assistant professor, instructor, lecturer, teaching assistant).

STEP 3—Allocation of an instructional staff member's salary among the courses he teaches in a given term based on the apportioned course credits assigned to the sections for which he has teaching responsibility.

STEP 4—Use of the allocated salary amounts to calculate a per-student credit hour cost for each course.

Each of these steps is described below in further detail.

STEP 1—Distribution of Course Credit Hours

For a "fixed credit" course, the total distributed credit = the course credit hours.

For a "variable credit" course, the total distributed credit = the total student credit hours elected divided by the total enrollment. This provides a course credit-hour value that is the average elected course credits per enrolled student.

Distribution of course credit hours among sections and further apportionment to instructors is a two-stage process.

Stage One

The course credit is distributed among the class types that comprise a given course, taking into account both the class type and the scheduled weekly meeting hours (also known as "scheduled contact hours") for that class type.

In general, the sections of courses offered as individualized instruction (class type "IND") or self-paced instruction (PSI) are stand-alone sections. That is, students elect only that one section for full course credit. In some courses, students have the choice of taking a course as a PSI or as

some combination of other class types. In these cases, the PSI section is separated from the other class types for the purposes of credit distribution.

For courses with *multiple class types*, the assumption is that students must elect one section of each class type to earn total course credit. Exceptions to this are usually noted in the published term *Time Schedule* and sometimes necessitate a slightly altered method of distributing credit than that described in the following examples. Such situations are handled on a case-by-case basis and the method of distributing course credit conforms as much as possible to the general principles guiding the PCSUM methodology.

The PCSUM method distributes the course credit hours so that the credit-hour value of each section is apparent and can be used in combination wtih instructor information to calculate course and section costs. The total course credit is divided among class types based on the scheduled weekly meeting hours for each as follows:

If all class types of a course are non-lab (lecture, recitation, discussion, or seminar): Each class type receives distributed credit in proportion to scheduled weekly meeting hours. For example, distributed credit hours for a 4-credit course (4.00 distributed credit) cold be calculated in the following two ways:

	Class Type	*Scheduled Weekly Meeting Hours*	*yields*	*Distributed Credit Hours*
	Lecture	3 (3/4)		3.00 (3/4)
	Recitation	1 (1/4)		1.00 (1/4)
	TOTAL	4		4.00
or	Lecture	3 (3/5)		2.40 (3/5)
	Recitation	2 (2/5)		1.60 (2/5)
	TOTAL	5		4.00

If one of the class types is a lab: Each scheduled weekly meeting hour for a non-lab section is assigned one distributed credit with the remainder assigned to the lab. If the scheduled weekly meeting hours for non-lab portions equal the total distributed credit such that there is nothing left to distribute to the lab, then the credit is distributed in proportion to the total scheduled weekly meeting hours total for all class types. For example, distributed credit hours for a 4-credit course (4.00 distributed credit) could be calculated in the following two ways:

	Class Type	*Scheduled Weekly Meeting Hours*	*yields*	*Distributed Credit Hours*
	Lecture	1		1.00 (for 1 hour)
	Recitation	2		2.00 (for 2 hours)
	Lab	4		1.00 (remainder)
	TOTAL	7		4.00
or	Lecture	2 (1/4)		1.00 (1/4)
	Recitation	2 (1/4)		1.00 (1/4)

Lab	4 (1/2)	2.00 (1/2)
TOTAL	8	4.00

Stage Two

The credit hours distributed to class types derived in Stage One are further apportioned to individual instructors based on the percent responsibility each has for the particular section. Percent responsibility information is furnished by the teaching unit.

Take, for example, the first course shown above (repeated here).

Class Type	*Scheduled Weekly Meeting Hours*	*yields*	*Distributed Credit Hours*
Lecture	3		3.00
Recitation	1		1.00
TOTAL	4		4.00

Assume that there is one lecture section (001) which meets on Monday, Wednesday, and Friday for one hour each day. The responsibility for this lecture is shared equally by Professor Abel and Associate Professor Bob.

There are two recitation sections for this course. Section 002 meets on Monday for one hour and is taught wholly by Graduate Student Teaching Assistant (GSTA) Cain. Section 003 meets on Tuesday for one hour and is shared by Professor Abel, who is responsible for 25%, and GSTA Cain, who is responsible for 75% of that section.

Section Number	*Distributed Credit*	*Class Type*	*Instructor*	*% Responsibility*	*Apportioned Credit*
001	3.00	Lecture	Abel	50%	1.50
			Bob	50%	1.50
					3.00
002	1.00	Recitation	Cain	100%	1.00
003	1.00	Recitation	Abel	25%	0.25
			Cain	75%	0.75
					1.00

STEP 2—Determination of the Instructional Salary Associated With Courses

The direct salary dollars included in the costing methodology are only those General Fund amounts paid from an instructionally titled appointment. Instructional titles are: professor, associate and assistant professor, instructor, lecturer, or GSTA. These titles may also be modified by a designation such as visiting, adjunct, clinical, or emeritus.

Though some instructional staff hold more than one appointment, only one appointment is associated with a particular teaching assignment. The following set of ordered rules determine which appointment is associated with a given teaching assignment.

1. **An appointment with a "teaching title" and "general fund salary dollars" is always the first choice.** If the instructional staff member has only one such appointment, that appointment is associated with all of that person's teaching assignments. Examples would be:

   One General Fund appointment with a teaching title:

   A. A person has only a General Fund appointment as a professor in the philosophy department. This appointment would be associated with all of the teaching assignments for that person, whether the course taught was a philosophy course or a course offered by another academic unit.

   Two appointments with teaching titles, one General Fund and one without funds:

   B. A person has a General Fund appointment as a professor in the philosophy department and another appointment without funds as a professor in the sociology department. The funded philosophy department appointment would be associated with all of the teaching assignments for that person whether the course was a philosophy course, a sociology course, or a course offered by another academic unit.

   Two General Fund appointments, one with a teaching title and one with another type of title:

   C. A person has a General Fund appointment as a professor in the philosophy department and a General Fund appointment as a program coordinator in the Center for Russian and East European Studies. The philosophy department appointment would be associated with all of the teaching assignments for that person whether the course was a philosophy course, a Russian course, or a course offered by another academic unit.

2. **If a person has "more than one general fund appointment," each with a "teaching title,"** then each instance of that person's teaching assignment must be associated with one of the appointments. (An appointment can be associated with more than one teaching assignment, but only one appointment can be associated with any one teaching assignment.) It is possible for an instructional staff member to hold a General Fund teaching title appointment that is not associated with any teaching assignment.
   Example:

   Two General Fund appointments, both with teaching titles:

D. A person holds a General Fund appointment as a professor of philosophy and a General Fund appointment as an associate professor of sociology. The philosophy department appointment would be associated with any teaching assignments in the philosophy department and the sociology department appointment would be associated with any teaching assignments in the sociology department. Teaching assignments in other departments or schools would be associated with the most logical of the appointment choices. For instance, if this person taught a course on American culture, the sociology department appointment would be associated with that course.

3. **If a person doesn't hold a General Fund appointment with a teaching title,** the choice of appointment to associate with teaching assignments is:

   First, an appointment with a teaching title without funds;

   Next, a General Fund appointment with a non-teaching title;

   Finally, any other appointment.

STEP 3—Allocation of Direct Instructional Salary Dollars to Courses

The allocation of direct instructional salary dollars to courses is a two-stage process. First, a portion of the salary of each person who has some teaching responsibility in the course is attached to that course, and second, those salary portions are summed to calculate the total cost for the course. More detail on these processes follows.

1. **Determining what portion of an instructional staff member's salary pays for a particular teaching assignment:**
   The total course credit hours apportioned to an instructor in teaching assignments associated with an appointment are summed. The General Fund salary dollars for that appointment are divided by the course-credit-hour sum to calculate a per course-credit-hour dollar amount for that appointment of that instructional staff member. The instructional salary of that appointment is then allocated to the courses associated with it based on that calculation. For example:

   E. A professor has a total General Fund salary of $10,000 from an appointment in the philosophy department. This professor is teaching a 3-credit-hour lecture course in philosophy and the discussion section of a sociology course with 2 distributed credit hours. The philosophy lecture has 100 students enrolled and the sociology discussion has 10 students enrolled. The professor's salary is allocated in the following manner:

      Total salary associated with this appointment = $10,000

      Total apportioned course credit hours associated with this appointment of this professor = 5.00

      Direct instructional salary per course credit hour = $2,000 (or $10,000/5.00)

Direct instructional dollars allocated to the philosophy course by virtue of this instructional staff member's teaching effort = $6,000 (or $2,000 x 3 course credit hours)

Direct instructional dollars allocated to the sociology course by virtue of this instructional staff member's teaching effort = $4,000 (or $2,000 x 2 course credit hours)

At this point in the instructional cost allocation, the number of students enrolled or the total student credit hours are not factors.

2. **Calculating the total cost for a course:**
The total instructional cost for a course is the sum of all instructional salaries allocated to all sections of that course. Example:

The sociology course mentioned in example E (above) is comprised of a lecture section and two discussion sections. One of those discussion sections is taught by the philosophy professor and has been allocated $4,000 instructional cost. The lecture section (taught by another faculty member) has been allocated $5,000 instructional cost, and the other discussion section (also taught by another faculty member) has been allocated $2,000. Therefore, the total instructional cost for this sociology course is $11,000.

STEP 4—Use of Instructional Cost for a Course to Calculate a Per-Student-Credit-Hour Cost

Once the instructional cost for a course is calculated, it is divided by the credit hours elected by all students registered for the course to arrive at a per-student-credit-hour cost for the course. Example:

The sociology course in the previous example above is a 3-credit-hour course with 22 students enrolled in the lecture section. Total elected student credit hours for this course are 66 (22 students multiplied by 3 credit hours each). The $11,000 instructional cost for the course divided by 66 equals a cost of $167 per student credit hour.

Appendix B: Detailed Description of Selected Elements

8/05

Descriptions of three CRAS elements were too expensive to present in the tabular format of the Data Dictionary. This appendix provides additional information about these elements. The elements are:

- Course Average Weekly Meeting Hours (CrsWklyMtgHrs)
- Instructor All Funds Appointment Percent (InstrAllFundApptPct)
- Instructor Appointing Organization Code (InstrAppOrgCd)

Course Average Weekly Meeting Hours (CrsWklyMtgHrs)
The scheduled class instructional contact hours expressed as average weekly meeting hours over a 14-week term (13 weeks of class instruction and 1 week of exams). Values in this field are derived from the University Course Database (UCDB) elements for meeting days and times by summing the total scheduled meeting hours for a week. Courses meeting for less than a full 14-week term, such as those offered in the spring and summer half terms or fall/winter term mini-courses, have the summed scheduled meeting hours for a week adjusted so that the result portrays the average weekly meeting hours if the class had met for 14 weeks. For example, a course that meets for 6 hours per week during a 7-week half-term (or 42 hours total) is equated to an average of 3 hours per week over a 14-week term (42/14=3). Some sections have incomplete meeting information in the UCDB. In the case of non-lab organized instruction, the average weekly meeting hours are assumed to be equal to the section credit hours and this field is filled using that assumption. For lab sections, the weekly meeting hours are set equal to other lab sections at a similar course level in the division. For sections with class type IND (individualized instruction) or PSI (personalized system of instruction) the weekly meeting hours are zero.

Instructor All Funds Appointment Percent (InstrAllFundApptPct)
The FTE (full-time-equivalent) appointment fraction for an indivdual in a given budgeted unit for an academic term. The FTE fraction is derived from the percent of effort and the funding period associated with all of the individual's appointments that fall within the beginning and ending dates of a term. Term beginning and ending dates for these purposes are defined as follows:

- Sept. 1-Dec. 31, Fall term
- Jan. 1-April 30, Winter term
- May 1-Aug. 31, Spring-Summer term

Typically, the period of an appointment (e.g., fiscal year, university year) equals or exceeds the period of the term. In some cases, however, the period of appiontment is less than a full term or only a portion of it falls within the term period. The general formula for the FTE fraction calculation is:

$$\text{FTE Fraction} = \%\ \text{Effort} \times \frac{\text{Length of the appt. that falls within the term}}{\text{Length of term}}$$

The FTE fraction is a cumulative total across all appointments funded from any source (e.g., General Fund accounts, sponsored research accounts, etc.) within a given unit.

Examples:

- A Fall term FTE calculation for an individual appointed full-time (100% effort) for the University year (Fall and Winter terms):

$$1.00 = 1.00 \times \frac{16 \text{ weeks}}{16 \text{ weeks}}$$

- A Fall term FTE calculation for an individual appointed full-time (100% effort) for the period of July 1–October 31 (overlap of the appointment period with the term period is Sept. 1–Oct. 31 or 8 weeks):

$$.50 = 1.00 \times \frac{8 \text{ weeks}}{16 \text{ weeks}}$$

- A Spring-Summer term FTE calculation for an individual appointed half-time (50% effort) for the Spring half-term (May 1–June 30 or 8 weeks):

$$.25 = 1.00 \times \frac{8 \text{ weeks}}{16 \text{ weeks}}$$

It should be noted that the FTE fraction for an individual can exceed 1.00 if the individual receives additional salary amounts through funding known as "instructional overload".

Instructor Appointing Organization Code (InstrApptOrgCd)
The organizational unit code for a unit in which an instructional staff member holds an appointment and which is associated with a course for which the individual has teaching responsibility. In general, this can be thought of as the unit which is paying the salary of an individual who is teaching a particular course. In cases of individuals with multiple appointments, the organizational unit code is determined by the Office of Academic Planning and Analysis using the following decision rules in the order listed:

1) If the instructor has a General Fund teaching title appointment in the unit offering the course, it is assumed that the instructor's organizational unit code is the same as the code for that unit.
2) If the individual does not have a General Fund teaching title appointment in the unit offering the course but has one elsewhere, the organization code for the appointing unit is assigned.
3) If the individual has more than one General Fund teaching title appointment outside the unit offering the course, the organizational code assigned is for the appointing unit that is within the same discipline, within the same school/college, or is the cross-listed department for the course.

4) If the individual has a non-teaching title appointment that includes General Fund teaching salary dollars, the organizational unit code of the appointing unit is assigned.

5) If the individual has a teaching title appointment that is funded solely by non-General Fund salary dollars or is unfunded entirely, the organizational code of the appointing unit is assigned. If multiple such appointments exist, priority is given to an appointment in the unit offering the course.

6) If the individual has a non-teaching title appointment that is funded solely by non-General Fund salary dollars, the organizational code of the appointing unit is assigned. If the individual has multiple such appointments, priority is given to an appointment in the unit offering the course.

7) If the individual teaching a course is unknown or does not have an active appointment during the given term, the organization code of the unit offering the course is assigned.