

OIS SPACE DATABASE

A Repository of Data Pertaining to University of Washington Facilities and Uses

As Of August 5, 1996

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OIS SPACE DATABASE

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as of August 5, 1996

Introduction

The OIS Space Database covers all space facilities under the jurisdiction and control of the University of Washington and the use thereof beginning with Autumn Quarter, 1992. The OIS Space Database is an inventory of facilities and facility uses as of October and is applicable to a fiscal year (July 1 of a given year to June 30 of the following year). This inventory snapshot is made available (generally in November) and is generally accepted as being representative of University facilities and facility use over the applicable fiscal year.

The OIS Space Database covers all University facilities at the Seattle, Bothell and Tacoma sites. Included are facilities located on or off campus sites. Included are facilities that are University owned as well as rented. All data in the OIS Space Database is taken from the University's Room Inventory System maintained by the Capital and Space Planning Office. Instructional use of facilities is taken from the Student Information System.

All data is held in tables. A table is composed of columns and rows with the intersection of a column and row being either empty (null) or holding one and only one value. A table represents a thing, either tangible or intangible, such as a student or course. A column represents attributes or characteristics about the thing the table represents. A row represents a specific instance, such a particular student, represented by the table. Hence, every row and column intersection is a fact. Facts in a table may be accessed by instance (row), attribute (column) or instance and attribute combination.

An example of a table, representing baseball players who are pitchers, is shown below:

Pitcher	Hits	Strike Outs	Walks	Runs	Earned Runs	Innings Pitched
A	25	10	5	15	14	40
B	50	27	35	32	28	89
C	87	23	8	56	56	123
D	34	45	67	7	6	56
E	0	1	4	1	1	1

An example of accessing facts by column (attribute) is shown below:

How many runs were scored?

Runs
15
32
56
7
1

An example of accessing facts by instance (row) is shown below:

What are the statistics of pitcher C?

Pitcher	Hits	Strike Outs	Walks	Runs	Earned Runs	Innings Pitched
C	87	23	8	56	56	123

An example of accessing facts by column (attribute) and instance (row) is shown below:

What Pitchers had more than twenty (20) strike outs and how many strike outs did they have?

Pitcher	Strike Outs
B	27
C	23
D	45

Two or more tables may be used together. Use of two or more tables together is called a join. A join is accomplished by merging tables or parts of tables together on the basis of keys. Keys permit joining tables together on the basis of data values or, as they are sometimes called, facts.

In addition to the OIS Space Database a user may be able to access data in the OIS Finance, OIS Building and other databases as they become operational.

Purpose and Limitations of the Database

The purpose of the OIS Space Database and related OIS databases is to provide a research, analysis and management data resource. These databases are organized around subjects such a building, an enrolled student or class meeting at a particular time point within a particular building's room. They are integrated in that subjects are related to one another. They are non-volatile in that data is composed of condition "snapshots" and they are time-variant in that all data is stated as being current as of a particular time point.

These databases are a resource which should not be used to support ongoing administrative processes. These databases are not transaction processing systems. These databases reflect transactions processed only at the time the database is updated. As an example, the database should not be used to determine the amount of University leased square feet today. However, a determination of the relative uses of leased space as of the inventory date would be an appropriate use.

The accuracy of the database is no more accurate than the underlying data first created and stored in University information systems at the time the data is extracted. Every effort has been made to reliably and properly extract data from these information systems. But the OIS Space Database can be no more accurate and complete than the underlying sources.

Structure of the OIS Space Database - An Overview

The OIS Space Database is organized around six (6) primary tables. These tables are:

- BLG_Building_History
- BLG_Room_Inventory_History
- BLG_Functional_Use_History
- OIS_Meeting_Times
- OIS_Meeting_Type, and
- OIS_Classroom_Use

These six (6) tables, for purposes of this documentation, are called data tables. The interrelationships of these data tables are shown on Chart 1.

In addition to the six (6) data tables the Database contains tables translating various coding schemes used in the data tables into English language phrases and labels. These coding scheme translation tables are called, for the purposes of this documentation, 'lookup' tables. Lookup tables used in the Database in conjunction with the core data tables are listed in Appendix A. Also shown are the data table key that should be used to navigate to the lookup table.

The OIS Space Database tables are stored in a relational database. The primary and foreign keys used to navigate between the data tables and a selected group of the lookup tables in this database are shown in Appendix B.

This database may be accessed on the University of Washington campus network by addressing:

parnassus.u.washington.edu

To access the Database, an authorized user is required to use any Oracle Structured Query Language (SQL) tool or similar Oracle (version 7) compliant database Structured Query Language (SQL) tool. SQL tools may run on any operating system or platform (Windows, DOS, Unix, OS/2, Mac, etc.) utilizing an Open System Interface and TCP/IP communication protocol. Example Oracle compliant SQL tools are MS Access with ODBC (Windows), GQL (Mac, Windows, and Unix), Q+E (Windows), Pablo Report Writer (Mac) and SQL Assist Report Wrtier (Unix and Windows). To receive authorization to access OIS Student Database tables please contact:

Bruce Vik
OIS Database Administrator
187 Administration Building
Box 351263
(206) 685-9953
brucev@u.washington.edu

For assistance in using the OIS Space Database please contact:

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OIS SPACE DATABASE

DATA TABLES

The six (6) core data tables in the database are:

BLG_Building_History¹
BLG_Room_Inventory_History²
BLG_Functional_Use_History³
OIS_Meeting_Times
OIS_Meeting_Type
OIS_Classroom_Use, and

BLG_Building_History

Each instance (sometimes called a row) in **BLG_Building_History** is uniquely identified by Fiscal_Year and Building. There is one and only one instance for each combination of Fiscal_Year and Building but one or more instances for each Building. Building represents a roofed structure for permanent or temporary shelter of persons, animals, plants or equipment. Fiscal_Year and Building represents the structure existing at the stated time point. Hence, there may be many Building but only one Fiscal_Year and Building. The data in **BLG_Building_History** is applicable to fiscal year 1993 (October, 1992) forward. The data in **BLG_Building_History** are things about buildings which are stable and infrequently change, such as year of construction or name.

BLG_Building_History instance attributes are:

<u>Attribute</u>	<u>Data Type</u>	<u>Length (In Bytes)</u>
FISCAL_YEAR	Text	4
BUILDING	Text	3
SQUARE_FEET	Number (Long)	4
NAME	Text	18
BLDG	Text	3
REPORT_SEQUENCE	Number (Intege	2
ON_OFF_CAMPUS	Text	1
YEAR_CONSTRUCTED	Text	4
BUILDING_TYPE	Text	5
SECTOR	Text	3
CAD	Text	2
LONG_NAME	Text	60
ADDRESS	Text	20

¹ A similiary name table, BLG_Building, exists in the OIS Space Database. This table is for the inventory in progress and should not be used.

² A similiary name table, BLG_Room_Inventory, exists in the OIS Space Database. This table is for the inventory in progress and should not be used.

³ A similiary name table, BLG_Functional_Use, exists in the OIS Space Database. This table is for the inventory in progress and should not be used.

BLD_Room_Inventory_History

Each instance (or row) in **BLD_Room_Inventory_History** is uniquely identified by a combination of Fiscal_Year, Building and Room_Number. Each instance in the table **BLD_Room_Inventory_History** is a room. A room is a space, within a building, normally enclosed on all sides including alcoves and recesses. (Note: a building may have one and only one room). Covered play areas, covered patios and covered walkways are exceptions to the enclosure criterion. Fiscal_Year and Building represents a building at a point in time (see table **BLG_Building_History**) that the room is located and, in combination, with Room_Number a particular room is represented.

There may be many instances in **BLD_Room_Inventory_History** for a given Fiscal_Year and Building but there is one and only one for a Room_Number for any Fiscal_Year and Building. The **BLD_Room_Inventory_History** attributes are, generally, stable over time but may change. Example attributes are square feet or capacity.

Instance attributes are:

<u>Attribute</u>	<u>Data Type</u>	<u>Length (In Bytes)</u>
FISCAL_YEAR	Text	4
BUILDING	Text	3
ROOM_NUMBER	Text	7
SQUARE_FEET	Number (Long)	4
ROOM_TYPE	Text	3
ORG_DEPT	Text	7
ORG_8_10	Text	3
DESCRIPTION	Text	15
CAPACITY	Number (Intege	2
FLOOR_CODE	Text	4

BLG_Functional_Use_History

Each instance (or row) in **BLG_Functional_Use_History** represents a use of a room within a building at a particular point in time. A room may have more than one use at a point in time. Hence, there may be more than one instance in this table for a given room at a given time. Data is for Fiscal Year 1996 forward.

An unique instance in **BLG_Functional_Use_History**, representing a use of a room, is Fiscal_Year, Building, Room_Number and Functional_Use_Code.

BLG_Functional_Use_History instance attributes are:

<u>Attribute</u>	<u>Data Type</u>	<u>Length (In Bytes)</u>
FISCAL_YEAR	Text	4

BUILDING	Text	3
ROOM_NUMBER	Text	7
FUNCTIONAL_USE_CODE	Text	4
FUNCTIONAL_USE_PERCENT	Number (Intege	2

OIS_Meeting_Times

Each instance in **OIS_Meeting_Times** represents a class meeting. A class meeting is a group of students assembled for taking instruction (generally, but not always, in a classroom, lab or other physical space) with an instructor giving instruction to the assembled group⁴ or, in the case of independent study, clinical or practicum the individualized teaching and learning relationship of an enrolled student and instructor⁵. An **OIS_Meeting_Times** instance, or class meeting, is uniquely identified by a combination of Year, Quarter, Course_Branch, Curric_Abbr, Course_No, Section_Id and Sequence_Number. A class meeting as represented in the table **OIS_Meeting_Times** is part of a specific course offering (see OIS Student Database table **OIS_Time Schedule**). Instances in this table are for Fall quarter, 1987 forward.

Attributes appearing in the **OIS_Meeting_Times** table are:

<u>Attribute</u>	Data <u>Type</u>	Length <u>(In Bytes)</u>
YEAR	Text	4
QUARTER	Text	1
COURSE_BRANCH	Text	1
CURRIC_ABBR	Text	6
COURSE_NO	Text	3
SECTION_ID	Text	3
SEQUENCE_NUM	Text	1
DAYS_OF_WEEK	Text	6
START_TIME	Number (Intege	2
END_TIME	Number (Intege	2
BUILDING	Text	3
ROOM_NUMBER	Text	7
MEETING_TYPE	Text	2
CLOCK	Number (Double	8
BLDG	Text	3
PRIME_SECTION_ID	Text	3
PRIME_MEETING	Text	1

OIS_Meeting_Type

Each instance in **OIS_Meeting_Type** represents a class meeting for Fall quarter, 1987 forward of the class meeting type lecture, seminar, studio, quiz, laboratory

⁴ Given technological change and distance learning opportunities this conceptualization of a class meeting is evolving. However, fundamental to the notion of a class meeting is the structured relationship between a group of enrolled students and a supervising or responsible instructor(s).

⁵ In the case of independent study, clinical or practicum all students enrolled in a course offering, for the purposes of this table are considered to be one class meeting. In the OIS Instructor Database this class meeting when associated with an instructor gives rise to a sub-type of class meeting which is the specific association of an instructor and an enrolled student.

or conference for which complete tenth day enrollment and class meeting time and place data is known.⁶ The class meeting types of the table instances are called Multi-Student Class Meetings. These type are sometimes referred to as organized or group class meetings. An instance in **OIS_Meeting_Type**, is uniquely identified by a combination of Year, Quarter, Meeting_Type, Building, Room_Number, Days_of_Week, Start_Time, End_Time, Course_Branch, Curric_Abbr, Course_No, and Extension. **OIS_Meeting_Type** is provided to facilitate calculation of class sizes and should only be used when attempting to derive average class meeting size and related statistics.

OIS_Meeting_Type attributes are:

<u>Attribute</u>	<u>Data Type</u>	<u>Length (In Bytes)</u>
YEAR	Text	4
QUARTER	Text	1
MEETING_TYPE	Text	2
BUILDING	Text	3
ROOM_NUMBER	Text	7
DAYS_OF_WEEK	Text	6
START_TIME	Number (Double)	8
END_TIME	Number (Double)	8
COURSE_BRANCH	Text	1
CURRIC_ABBR	Text	6
COURSE_NO	Text	3
EXTENSION	Text	1
CLOCK	Number (Double)	8
ENROLL_10	Number (Double)	8
REC_COUNT	Number (Double)	8

OIS_Classroom_Use

Each instance in **OIS_Classroom_Use** represents a scheduled instructional use, in a half hour increment, of a University facility. An instance is uniquely represented by Year, Quarter, Building, Room_Number, Day, Time, Course_Branch, Curric_Abbr, Course_No.⁷ The scheduled use could be of any class meeting type so long as time, place, and course are fully known. An instructional use is degree credit instruction only.

Attributes appearing in **OIS_Classroom_Use** are:

<u>Attribute</u>	<u>Data Type</u>	<u>Length (In Bytes)</u>
YEAR	Text	4

⁶ OIS_Meeting_Type is, in actuality, a view of several tables in the OIS Databases though it appears to the user as a table. This view should only be opened in a query. Use of OIs_Meeting_Type is extremely process intensive and will markedly impact performance.

⁷ OIS_Classroom_Use is, in actuality, a view of several tables in the OIS Databases including the table BLG_Room_Inventory_History. This view is process intensive and should be used only in a query. In addition, because the view is dependent upon the table BLG_Room_Inventory_History, data for summer and fall quarter of any year will not become available until the table BLG_Room_Inventory_History is updated for the applicable fiscal year, generally in November.

QUARTER	Text	1
BUILDING	Text	3
ROOM_NUMBER	Text	7
ROOM_TYPE	Text	3
CAPACITY	Number (Double	8
DAY_REPORT_SEQUENCE	Text	1
DAY	Text	9
TIME	Number (Double	8
AM_PM_EVE	Text	3
COURSE_BRANCH	Text	1
CURRIC_ABBR	Text	6
COURSE_NO	Text	3
EXTENSION	Text	1
ENROLL_10	Number (Double	8

TABLE: BLG_Building_History

Entity Represented: A building. A building is a roofed structure for permanent or temporary shelter of persons, animals, plants or equipment. Data is for fiscal year 1993 (as of October, 1992) forward.

An Entity Is Uniquely Represented By (primary key): Fiscal_Year, Building.

Instance attributes, in this table, are:

FISCAL_YEAR is the annual period of time beginning July 1 and ending June 30 of the following calendar year. Fiscal year is known by the calendar year of the fiscal year's last day.

BUILDING a code representing a specific building.

SQUARE_FEET the sum of all areas on all floors of a building included within the outside faces of its exterior walls, including floor penetration areas, however insignificant, for circulation and shaft areas that connect one floor to another. This is sometimes referred to a gross square feet. (Square feet is calculated by multiplying length, measured in feet, and width, measured in feet).

NAME the name of the building.

BLDG the representation of the building used in other University information systems; particularly the time schedule component of the Student Information System.

REPORT_SEQUENCE a report preparation sorting sequence. Generally this sorting sequence will display buildings whose name begins with alphabetical characters first and numerical characters last.

ON_OFF_CAMPUS indicates location site and ownership status where:

C = On Campus (Seattle - University owned)

F = Off Campus

L = On Campus (Seattle - University leased)

T = Tacoma (University leased)

W = Bothell (University leased)

(See Lookup Table: BLG_On_Off_Campus)

YEAR_CONSTRUCTED calendar year of building's original construction. (Note: null is unknown).

BUILDING_TYPE this attribute is not now supported and should not be used. It is reserved for future use.

SECTOR the geographic subdivision of the Seattle campus site as shown in Appendix C - Seattle Campus Map. If the building is not part of the Seattle site or its location, for whatever reason, can not be pinpointed, then the value is NA or N/A.

CAD this attribute is not now supported and should not be used. It is reserved for future use.

LONG_NAME this attribute is not now supported and should not be used. It is reserved for future use.

ADDRESS this attribute is not now supported and should not be used. It is reserved for future use.

TABLE: BLG_ROOM_INVENTORY_HISTORY

Entity Represented: A room. A room is a space, within a building, normally enclosed on all sides including alcoves and recesses. Data is for fiscal year 1993 (as of October, 1992) forward.

An Entity Is Uniquely Represented By (primary key): Fiscal_Year, Building and Room_Number.

Attributes of Instances in this table are:

FISCAL_YEAR is the annual period of time beginning July 1 and ending June 30 of the following calendar year. Fiscal year is known by the calendar year of the fiscal year's last day.

BUILDING a code representing a specific building. (See attribute **BUILDING** in table **BLG_Building_History**).

ROOM_NUMBER is the unique identifier of a room (Note Room_Number has meaning only when used in conjunction with BUILDING).

SQUARE_FEET the assignable floor area of the room. This is the total floor area, within the interior walls, of the room available to the occupant or use. (Square feet is calculated by multiplying length, measured in feet, and width, measured in feet). Note: The sum of room square feet does not equal total building gross square feet due to the existence of building service areas and other nonassignable areas within a building.

ROOM_TYPE indicates the intended primary use or activity which occurs in the room. (See Lookup Table BLG_Room_Type and Table BLG_Room_Type Group. BLG_Room_Type_Group is a higher order Room_Type classification.) See also Appendix D - Room Type Definitions.

ORG_DEPT indicates the department occupying or assigned to occupy the the room and is represented by the first seven (7) digits of the University's organization coding. (See table FI_Org_Dept).

ORG_8_10 indicates a subdivision of a department. This attribute has meaning only when used in conjunction with ORG_DEPT. This attribute is not recommended for use.

DESCRIPTION is a descriptive label indicating the purpose of the activity occurring in the room and/or occupant of the room (Examples: cloakroom or food prep area).

CAPACITY the rated number of stations for the stated Room_Type that the room accommodates. (Example: student seating space in the case of classroom or workstations in the case of an administrative office).

FLOOR_CODE the floor that the room is located within the building. (Note: Room_Number should not be relied upon to indicate building floor).

TABLE: BLG_FUNCTIONAL_USE_HISTORY

Entity Represented: A room use at a stated time point.

An Entity Is Uniquely Represented By (primary key): Fiscal_Year, Building, Room_Number and Functional_Use_Code.

Attributes of Instances in this table are:

FISCAL_YEAR is the annual period of time beginning July 1 and ending June 30 of the following calendar year. Fiscal year is known by the calendar year of the fiscal year's last day.

BUILDING a code representing a specific building. (See attribute **BUILDING** in table **BLG_Building_History**).

ROOM_NUMBER is the unique identifier of a room (Note **ROOM_NUMBER** has meaning only when used in conjunction with **BUILDING**. See attribute **ROOM_NUMBER** in table **BLG_Room_Inventory_History**).

FUNCTIONAL_USE_CODE indicates use (See Lookup table: **BLG_Functional_Use_Code**).

FUNCTIONAL_USE_PERCENT indicates the proportion (stated in a percent) that this use makes of the room relative to all room uses.

TABLE: OIS_MEETING_TIMES

Entity Represented: A class meeting. A class meeting is a group of students assembled for taking instruction (generally, but not always, in a classroom, lab or other physical space) with an instructor giving instruction to the assembled group⁸ or, in the case of independent study, clinical or practicum the individualized teaching and learning relationship of an enrolled student and instructor⁹. Instances in this table are for Fall quarter, 1987 forward. A class meeting as represented in the table **OIS_Meeting_Times** is part of a specific course offering (see OIS Student Database table **OIS_Time Schedule**).

An Entity Is Uniquely Represented By (primary key): Year, Quarter, Course_Branch, Curric_Abbr, Course_No, and Section_Id and Sequence_Num.

Attributes of Instances in this table are:

YEAR is the annual calendar period.

QUARTER is the academic term. (See Lookup Table - **OIS_Quarter**).

COURSE_BRANCH an indicator of the University campus of the course offering where:

- 0 = Seattle,
- 1 = Bothell
- 2 = Tacoma.

Note: In the University's Student Information System the Evening Degree Program is often regarded as a campus. In the OIS Student Database the evening degree program is considered a Seattle campus program. Evening degree program course offerings and course registrations are identified by means other than campus coding. (Please see attribute **EVENING_DEGREE** in table **OIS_Time_Schedule**).

CURRIC_ABBR is an indicator of a body of knowledge comprised of one or more courses. (See Lookup Table **OIS_Curriculum**).

COURSE_NO the identification of a specific course. **COURSE_NO** has meaning only in conjunction with **CURRIC_ABBR**. (Note: A course is the fundamental unit by which knowledge is formally organized for presentation to enrolled students.) **Course_No**, by tradition, in the range of 100 - 499 does indicate that

⁸ Given technological change and distance learning opportunities this conceptualization of a class meeting is evolving. However, fundamental to the notion of a class meeting is the structured relationship between a group of enrolled students and a supervising or responsible instructor(s).

⁹ In the case of independent study, clinical or practicum all students enrolled in a course offering, for the purposes of this table are considered to be one class meeting. In the OIS Instructor Database this class meeting when associated with an instructor gives rise to a sub-type of class meeting which is the specific association of an instructor and an enrolled student.

the course is intended to be attempted by undergraduate students and that **Course_No** greater than 499 are intended to be attempted by graduate and professional students. However, graduate and professional students do attempt courses having a **Course_No** in the range of 100 - 499 and undergraduates do attempt courses having a **Course_No** greater than 499.

SECTION_ID the identification of a course offering. (Note: **SECTION_ID** has meaning only when used in conjunction with Year, Quarter, Course_Branch, Curric_Abbr and Course_No.)

SEQUENCE_NUM a serially assigned number distinguishing one class meeting from other within a course offering (See OIS Student Database table **OIS_Time_Schedule**).

DAYS_OF_WEEK indicates the day on which the class meeting is schedule to meet. A class scheduled to meet five days a week would be shown as follows:

MTWTF

where M indicates Monday, the first T indicates Tuesday and so forth. If the class is not scheduled to meet or is unknown the value is null.

Note: **DAYS_OF_WEEK** is a six character text attribute with each place in the attribute indicating a particular day beginning with Monday and ending with Saturday. A blank within the attribute indicates that the class does not meet on the corresponding day. A character in a space (1st space and M for Monday, 2nd space and T for Tuesday, third space and W for Wednesday, fourth space and T for Thursday, fifth space and F for Friday and sixth space and S for Saturday) indicates that the class meets on the corresponding day. This data structure relies upon physical storage to derive its meaning and is not "best" practice. **DAY_OF_WEEK** should be expected to be modified at a future date to better conform with "best" practice.

START_TIME the scheduled beginning time for the class meeting for each class meeting day (See: **DAY_OF_WEEK**) on the 24 hour clock. If the class is not scheduled to meet or is unknown the value is null.

END_TIME the scheduled ending time for the class meeting for each class meeting day (See: **DAY_OF_WEEK**) on the 24 hour clock. If the class is not scheduled to meet or is unknown the value is null.

BUILDING the building in which the class meeting is scheduled to take place (See attribute **BUILDING** in OIS Space Database table **BLG_Building_History**).

ROOM_NUMBER the room in which the class meeting is scheduled to take place (See attribute **ROOM_NUMBER** in OIS Space Database table BLG_Building_History).

MEETING_TYPE indicates the class meeting primary instructional modality employed to convey knowledge between faculty and student(s). Instructional modalities are:

CK = Clerkship. Student rotation in a clinical setting focusing upon learning client care management under supervised conditions.

CL = Clinical. An instructional mode where students learn in real-life situations while assisting persons in need of special expertise and service. It is generally used in client - health care related fields. The usual method of knowledge transmission is tutorial and individualized.

CO = Conference. A scheduled individual or small group tutorial.

IS = Independent Study. A student works individually with an instructor to gain knowledge on a specific topic of mutual interest. The student takes primary responsibility for locating and acquiring knowledge while using the instructor periodically as a tutorial resource and to assess progress. Instruction does not typically occur at pre-arranged times. Thesis or dissertation course work are examples of specialized types of Independent Study

LB = Laboratory. Instruction presented in a setting which is specially designed and equipped to accommodate hands-on, controlled, supervised experimentation, exploration, performance and analysis by the student.

LC = Lecture. An instructional mode which is primarily a formal unidirectional conveyance of knowledge from the instructor(s) to a group of students.

PR = Practicum. Supervised individualized instruction usually occurring in a field or work setting.

QZ = Quiz. Instruction in a small group context designed to facilitate follow-up discussion and deeper understanding of information previously presented in a lecture.

SM = Seminar. A small group instructional mode for intensive learning of subject matter. Students are often expected to contribute actively to discussion and presentations.

ST = Studio. Instruction usually presented in a setting especially designed and equipped to accommodate hands-on, controlled, supervised and experiential learning.

See Lookup Table **OIS_Class_Meeting_Type**.

CLOCK is the lapsed time (where the first 50 minutes equal 1 hours) that the class meets on a meeting day times the number of days that the class meets per week. If **START_TIME**, **END_TIME** or **DAYS_OF_WEEK** is unknown then **CLOCK** equals 0. This attribute is applicable only to those instances whose **MEETING_TYPE** is other than IS, PR or CL.¹⁰

BLDG an indicator of the building from the time schedule component of the Student Information System. (See attribute **BLDG** in the table **BLG_Building_History**). This attribute is an alternative indicator of the building in which the class meeting occurs. In most cases, **BLDG** should not be used.

PRIME_SECTION_ID this attribute is reserved for use by the Office of Institutional Studies and its use is not supported.

PRIME_MEETING this attribute is reserved for use by the Office of Institutional Studies and its use is not supported.

¹⁰ In some cases where partial or complete data is known **CLOCK** is estimated and inferred based upon course credits attempted and the number of class meetings of the course. This estimating process limits **CLOCK** to a maximum of five (5) time course credits and a minimum of one half course credits allocated to the class meetings of the course offering.

TABLE: OIS_MEETING_TYPE¹¹

Entity Represented: Each instance in **OIS_Meeting_Type** represents a class meeting for Fall quarter, 1987 forward of the class meeting type lecture, seminar, studio, quiz, laboratory or conference for which complete tenth day enrollment and class meeting time and place data is known.

An Entity Is Uniquely Represented By (primary key): Year, Quarter, Meeting_Type, Building, Room_Number, Days_of_Week, Start_Time, End_Time, Course_Branch, Curric_Abbr, Course_No and Extension.

CAUTION: **OIS_Meeting_Type** is made available to facilitate calculation of class size statistics and should be used for that purpose and that purpose only. Other queries and purposes will probably be better served by using **OIS_Classroom_Use** or **OIS_Meeting_Times**. The class meeting types of table instances are called Multi-Student Class Meetings. These type are sometimes referred to as organized or group class meetings.

Instance attributes in this table are:

YEAR is the annual calendar period.

QUARTER is the academic term. (See Lookup Table - OIS_Quarter).

MEETING_TYPE indicates the class meeting primary instructional modality employed to convey knowledge between faculty and student(s). Instructional modalities are:

CK = Clerkship. Student rotation in a clinical setting focusing upon learning client care management under supervised conditions.

CL = Clinical. An instructional mode where students learn in real-life situations while assisting persons in need of special expertise and service. It is generally used in client - health care related fields. The usual method of knowledge transmission is tutorial and individualized.

CO = Conference. A scheduled individual or small group tutorial.

IS = Independent Study. A student works individually with an instructor to gain knowledge on a specific topic of mutual interest. The student takes primary responsibility for locating and acquiring knowledge while using the instructor periodically as a tutorial resource and to assess progress. Instruction does not

¹¹ OIS_Meeting_Type is, in actuality, a view of several tables in the OIS Databases though it appears to the user as a table. This view should only be opened in a query. Use of OIS_Meeting_Type is extremely process intensive and will markedly impact performance.

typically occur at pre-arranged times. Thesis or dissertation course work are examples of specialized types of Independent Study

LB = Laboratory. Instruction presented in a setting which is specially designed and equipped to accommodate hands-on, controlled, supervised experimentation, exploration, performance and analysis by the student.

LC = Lecture. An instructional mode which is primarily a formal unidirectional conveyance of knowledge from the instructor(s) to a group of students.

PR = Practicum. Supervised individualized instruction usually occurring in a field or work setting.

QZ = Quiz. Instruction in a small group context designed to facilitate follow-up discussion and deeper understanding of information previously presented in a lecture.

SM = Seminar. A small group instructional mode for intensive learning of subject matter. Students are often expected to contribute actively to discussion and presentations.

ST = Studio. Instruction usually presented in a setting especially designed and equipped to accommodate hands-on, controlled, supervised and experiential learning.

See Lookup Table **OIS_Class_Meeting_Types**.

BUILDING the building in which the class meeting is scheduled to take place (See attribute **BUILDING** in OIS Space Database table BLG_Building_History).

ROOM_NUMBER the room in which the class meeting is scheduled to take place (See attribute **ROOM_NUMBER** in OIS Space Database table BLG_Building_History).

DAYS_OF_WEEK indicates the day on which the class meeting is scheduled to meet. A class scheduled to meet five days a week would be shown as follows:

MTWTF

where M indicates Monday, the first T indicates Tuesday and so forth. If the class is not scheduled to meet or is unknown the value is null.

Note: **DAYS_OF_WEEK** is a six character text attribute with each place in the attribute indicating a particular day beginning with Monday and ending with Saturday. A blank within the attribute indicates that the class does not meet on

the corresponding day. A character in a space (1st space and M for Monday, 2nd space and T for Tuesday, third space and W for Wednesday, fourth space and T for Thursday, fifth space and F for Friday and sixth space and S for Saturday) indicates that the class meets on the corresponding day. This data structure relies upon physical storage to derive its meaning and is not “best” practice. **DAY_OF_WEEK** should be expected to be modified at a future date to better conform with “best” practice.

START_TIME the scheduled beginning time for the class meeting for each class meeting day (See: **DAY_OF_WEEK**) on the 24 hour clock. If the class is not scheduled to meet or is unknown the value is null.

END_TIME the scheduled ending time for the class meeting for each class meeting day (See: **DAY_OF_WEEK**) on the 24 hour clock. If the class is not scheduled to meet or is unknown the value is null.

COURSE_BRANCH an indicator of the University campus of the course offering where:

- 0 = Seattle,
- 1 = Bothell
- 2 = Tacoma.

Note: In the University’s Student Information System the Evening Degree Program is often regarded as a campus. In the OIS Student Database the evening degree program is considered a Seattle campus program. Evening degree program course offerings and course registrations are identified by means other than campus coding. (Please see attribute **EVENING_DEGREE** in table **OIS_Time_Schedule**).

CURRIC_ABBR is an indicator of a body of knowledge comprised of one or more courses. (See Lookup Table **OIS_Curriculum**).

COURSE_NO the identification of a specific course. **COURSE_NO** has meaning only in conjunction with **CURRIC_ABBR**. (Note: A course is the fundamental unit by which knowledge is formally organized for presentation to enrolled students.) **Course_No**, by tradition, in the range of 100 - 499 does indicate that the course is intended to be attempted by undergraduate students and that **Course_No** greater than 499 are intended to be attempted to be taken by graduate and professional students. However, graduate and professional students do attempt courses having a **Course_No** in the range of 100 - 499 and undergraduates do attempt courses having a **Course_No** greater than 499.

EXTENSION an indicator if the course offering of this class meeting is sponsored by University Education Outreach (formerly known as University Extension) on a self-sustaining financial basis (non-state supported) where T means that the

course offering is sponsored by University Educational Outreach and F means that it is not. (Note: T and F are not boolean logic they are text characters.)

CLOCK is the lapsed time (where the first 50 minutes equal 1 hours) that the class meets on a meeting day times the number of days that the class meets per week. If **START_TIME**, **END_TIME** or **DAYS_OF_WEEK** is unknown then **CLOCK** equals 0.¹² See attribute **CLOCK** in table **OIS_Meeting_Times**.

ENROLL_10 is the count of the number of registrations in this course offering and class meeting as of the quarter's tenth instructional day. (Note: Because a course offering may be instructed in more than one class meeting, summing **ENROLL_10** across all class meetings of a course offering will result in a greater number of registrations than registrations in the course offering. Course registration data is derived from table **OIS_Course_Enrollment** in the OIS Student Database.)

REC_COUNT this attribute is reserved for use by the Office of Institutional Studies and it's use is not supported.

NOTES ON CALCULATION OF AVERAGE CLASS MEETING SIZE

The intended purpose of **OIS_Meeting_Type** is use to determine average class meeting size by curricula, class meeting type, course level, department, college or campus. Class meetings represented therein must be of a certain class meeting type, generally referred to a organized class meetings and data pertaining to time and place of class meeting must be known. Class meetings for which there is incomplete information are excluded.

Average class meeting size is a weighted **ENROLL_10** average. The weighting factor is **CLOCK**. To illustrate assume that there are two class meetings as follows:

<u>Class Meeting</u>	<u>Clock</u>	<u>Enroll_10</u>
A	5	100
B	3	600

A simple arithmetic average class meeting size would be:

$$(100 + 600) / 2 \text{ or } 350.$$

However a weighted average would be:

$$(5 * 100) + (3 * 600) / (5+3) = 287.5$$

¹² In some cases where partial or complete data is known **CLOCK** is estimated and inferred based upon course credits attempted and the number of class meetings of the course. This estimating process limits **CLOCK** to a maximum of five (5) time course credits and a minimum of one half course credits allocated to the class meetings of the course offering.

The purpose of a weighted average is to better represent conditions that students and instructors experience. Using **CLOCK** as the weighting factor permits the determination of an average class size that is representative of overall conditions and time spent in class meetings by students and instructors alike.

A weighted average class meeting size is best derived as follows:

$$\text{sum of (CLOCK * ENROLL_10) / sum of (CLOCK)}$$

A common mistake is to sum **ENROLL_10** and sum **CLOCK** independently, to derive a product of the two sums and then divide the product by the sum of **CLOCK**. **THIS IS INCORRECT.**

The correct procedure is to sum the cross product of **CLOCK** and **ENROLL_10** and then divide by the sum of **CLOCK**.

TABLE: OIS_CLASSROOM_USE¹³

Entity Represented: Instructional Use of Facilities. Each instance in **OIS_Classroom_Use** represents scheduled instructional use, in a half hour increment, of a University facility. The scheduled use could be of any class meeting type so long as time, place, and course are fully known.

An Entity Is Uniquely Represented By (primary key): Year, Quarter, Building, Room_Number, Day, Time, Course_Branch, Curric_Abbr, Course_No.

Attributes appearing in **OIS_Classroom_Use** are:

YEAR is the annual calendar period.

QUARTER is the academic term. (See Lookup Table - OIS_Quarter).

BUILDING the building in which the class meeting is scheduled to take place (See attribute **BUILDING** in OIS Space Database table **BLG_Building_History**).

ROOM_NUMBER the room in which the class meeting is scheduled to take place (See attribute **ROOM_NUMBER** in OIS Space Database table **BLG_Room_Inventory_History**).

ROOM_TYPE indicates the intended primary use or activity which occurs in the room. (See Lookup Table BLG_Room_Type and Table BLG_Room_Type Group. BLG_Room_Type_Group is a higher order Room_Type classification.) See also Appendix D - Room Type Definitions.

CAPACITY the rated number of stations for the stated Room_Type that the room accommodates. (Example: student seating space in the case of classroom).

DAY_REPORT_SEQUENCE an indicator of the order in which day appears within a week. This indicator may be used to aid report generation and display of data by day of week in order of day within week.

DAY a calendar day on which the indicated class meeting is scheduled to use the indicated classroom.

¹³ OIS_Classroom_Use is, in actuality, a view of several tables in the OIS Databases including the table BLG_Room_Inventory_History. This view is process intensive and should be used only in a query. In addition, because the view is dependent upon the table BLG_Room_Inventory_History, data for summer and fall quarter of any year will not become available until the table BLG_Room_Inventory_History is updated for the applicable fiscal year, generally in November.

TIME the first minute of a 30 minute increment (on the 24 hour clock) in which the indicated class meeting is scheduled to use the indicated classroom for the 30 minute increment in whole or in part.¹⁴

AM_PM_EVE is an indicator of that part of the day in which the instructional use takes place where:

AM = 7:30am to 11:59am.
PM = noon to 4:59pm, and
EVE = 5:00pm to 10:pm.¹⁵

COURSE_BRANCH an indicator of the University campus of the course offering where:

0 = Seattle,
1 = Bothell
2 = Tacoma.

Note: In the University's Student Information System the Evening Degree Program is often regarded as a campus. In the OIS Student Database the evening degree program is considered a Seattle campus program. Evening degree program course offerings and course registrations are identified by means other than campus coding. (Please see attribute **EVENING_DEGREE** in table **OIS_Time_Schedule**).

CURRIC_ABBR is an indicator of a body of knowledge comprised of one or more courses. (See Lookup Table OIS_Curriculum).

COURSE_NO the identification of a specific course. COURSE_NO has meaning only in conjunction with CURRIC_ABBR. (Note: A course is the fundamental unit by which knowledge is formally organized for presentation to enrolled students.) Course_No, by tradition, in the range of 100 - 499 does indicate that the course is intended to be attempted by undergraduate students and that Course_No greater than 499 are intended to be attempted to be taken by graduate and professional students. However, graduate and professional students do attempt courses having a Course_No in the range of 100 - 499 and undergraduates do attempt courses having a Course_No greater than 499.

EXTENSION an indicator if the course offering of this class meeting is sponsored by University Education Outreach (formerly known as University Extension) on a self-sustaining financial basis (non-state supported) where T means that the course offering is sponsored by University Educational Outreach and F means that it is not. (Note: T and F are not boolean logic they are text characters.)

¹⁴ An instance whose time is prior to 7:30am and after 10:00pm is excluded.

¹⁵ An instance whose time is prior to 7:30am and after 10:00pm is excluded.

ENROLL_10 is the count of the number of registrations in this course offering as of the quarter's tenth instructional day applicable to this class meeting. (Note: Because a course offering may be instructed in more than one class meeting, summing ENROLL_10 across all class meetings of a course offering will result in a greater number of registrations than registrations in the course offering. Course registration data is derived from table **OIS_Course_Enrollment** in the OIS Student Database.)

APPENDIX A

LOOKUP TABLES FOR USE IN CONJUNCTION WITH OIS SPACE DATABASE DATA TABLES

<u>Lookup Table</u>	<u>Primary Key</u>	<u>Notes on Use</u>
BLG_ON_OFF_CAMPUS string joined on its	ON_OFF_CAMPUS	This table translates ON_OFF_CAMPUS to a literal. Generally the table should be primary key.
BLD_FUNCTIONAL_USE_CODE to joined	FUNCTIONAL_USE_CODE	This table translates FUNCTIONAL_USE_CODE a string literal. Generally the table should be on its primary key.
BLG_ROOM_TYPE its primary	ROOM_TYPE	This table translates ROOM_TYPE to a string literal and associates ROOM_TYPE to a higher order classification called ROOM_TYPE_GROUP. Generally the table should be joined on key.
BLG_ROOM_TYPE_GROUP on	ROOM_TYPE_GROUP	This table translates ROOM_TYPE_GROUP to a string literal. Genrally the table should be joined its primary key.
FI_ORG_DEPT except that this table is year. OIS_ORG_DEPT is academic term (ie QUARTER).	FISCAL_YEAR ORG_DEPT	This table sets the attributes of a Department, including sub-college, college, unit and campus parents. Generally, a join should be on this table's primary key. This table is similar to OIS_ORG_DEPT and the attributes of a Department are the same specific to a fiscal specific to an Please see OIS Instructor Database documentation for a complete description of this table.
OIS_CLASS_MEETING_TYPE	CLASS_MEETING _TYPE_CODE	This table translates CLASS_MEETING_TYPE_CODE into a string literal. Generally, a join should be on this table's primary key.
OIS_CURRICULUM a string the	CURRIC_ABBR	This table translates CURRIC_ABBR to literal (example English) and associates curriculum to a responsible department.
OIS_QUARTER	QUARTER	This table translates a QUARTER to a string literal. Generally the table should be joined on its primary key.
OIS_QUARTER_TO_FISCAL_YEAR tables tables primary key.	YEAR QUARTER	This table associates an academic term to a fiscal year. It should always be used when joining having a key of YEAR and QUARTER to having FISCAL YEAR as or part of the
OIS_ORG_DEPT table's	YEAR QUARTER ORG_DEPT	This table sets the attributes of a Department, including sub-college, college, unit and campus parents. Generally, a joint should be on the primary key. This table is similar to FI_ORG_DEPT and the attributes of a Department are the same except that this table is specific to an academic term (ie. QUARTER). FI_ORG_DEPT is specific to a fiscal year. Please see OIS Instructor Database

documentation for a complete description of this table.

APPENDIX B

OIS SPACE DATABASE - PRIMAY AND FOREIGN KEY RELATIONSHIP

APPENDIX C
SEATTLE CAMPUS SITE MAP
SHOWING SECTORS

APPENDIX D

ROOM TYPE DEFINITIONS

Please note in addition to the Room Types defined in this Appendix the University of Washington as established additional room types. These room types are:

As a Special Types of 110 Classroom:

- 120 Peripheral Classroom
- 130 Special Classroom
- 140 Off Campus Classroom

As a Special Type of 220 or 225 Open Laboratory or Open Laboratory Service

- 230 Computer Laboratory
- 235 Computer Laboratory Service

As a Special Type of 310 Office

- 311 Academic Office
- 312 Administrative Office
- 313 Student Assistant Office
- 314 Secretary/Clerical Office
- 316 Staff Office
- 317 Other Office

As a Special Type of 410 Study Room

- 412 Non-Library Study Room

As a Special Type of 440 Processing Room

- 441 User Assistance
- 442 Technical Processing

As a Special Type of 650 Lounge

- 651 Departmental Lounge

As a Special Type of 660 Merchandising

- 661 Vending Area

As a Special Type of 710 Central Computer or Telecommunications and 715 Central Computer or Telecommunications Support

- 711 Department Computer Support
- 715 Department Computer Support Service

As a Special Type of 000 Unclassified Facilities

- 010 Building Service Area
- 020 Circulation Area
- 030 Mechanical Area
- 040 Structural Area
- 080 Unusable Area
- 090 Parking Garage
- 095 Parking Garage Service