# *Database Management I (420-D10-HR)*

# *Lab 02 – Paper Relational Database*

Date assigned: Wednesday August 24,2016

Date due: Wednesday August 24,2016, 11:50am

**Learning Objectives**

Upon successful completion of this lab exercise, the student will be able to:

1. Understand how to navigate a paper-based relational database
2. How to perform CRUD actions on the paper database
3. have a preliminary understanding of how tables in a relational database can be used to store and retrieve information
4. explain some of the advantages of the database approach over the traditional file approach

**To uploaded Moodle:**

1. The ***username\_*D10\_L02\_Paper\_Database.doc** file completed as instructed in the lab.

**To Start:**

1. Fill in this document with your solutions then submit to moodle.
2. This is an individual lab (not in groups)

**Marks:**

|  |  |  |
| --- | --- | --- |
| **Question** | **Mark** | **Out of** |
|  |  |  |
|  |  |  |
| Keys |  | 6 |
| Database Lookups |  | 0 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
| Database Create,Update, Delete |  | 0 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
|  |  | 4 |
| Organization |  | 5 |
| **Total** |  | **83** |

1. **Key identifiers**

***Objectives***: Analyze and identify the keys for certain table types

A ‘key’ is a field that uniquely identifies a record in a table.

For example, if you look at the Student Table, the StudentNumber field is a key to identify a specific record in the Student Table.

For example: what is the StudentName and StudentAddress in the StudentTable where the StudentNumber is 0201111?

Answer: Patty O’Furniture, 26 Oak St.

Identify keys for the following tables:

|  |  |
| --- | --- |
| Table Name | Key Fields |
| STUDENT | StudentName, StudentNumber |
| PROGRAM | ProgramCode, StudentNumber |
| LOAN\_APPLICATION | StudentNumber+CalenderYear |
| COURSE | CourseNumber, CourseName |
| TEACHER | TeacherNumber, TeacherName |

Hints: -

1. there may be more than one key per table
2. you may need a combination of two fields to uniquely identify a record in the table (for example, LOAN\_APPLICATION, above)

# Paper relational database lookups

***Objectives***: Understand how to lookup/navigate data in a relational database

***To Do:***

Using the tables in the appendix for this lab, answer the questions below.

***For the Registrar:***

1. Give the student number and name of all students registered in 420-E10-HR

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 00011140001114 | Jerry Atrix |
| 0001115 |  |
| 0001115 | Ella Fant |

1. Give the student number and name of all students who are registered for more than 1 course and who have a student loan for 2002.

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 00011150001115 | **Ella Fant** |
|  |  |
|  |  |

1. How many students are registered in ECCE I? \_\_1\_\_\_\_\_ 3

***For The Admissions Officer:***

1. Give the student number and name of all students who have been admitted from D'Arcy McGee High School.

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 00011140001114 | **Jerry Atrix** |
| 00011160001116 | Donna Hood |
| 0201113 | Tom Thumb |
| 5551112 | Sam Sham |
| 5551113 | Cash Carry |
| 9902222 | Sue Yu |
| 5551112 | Sam Sham |

1. Give the student number and name of all students from Philemon Wright High School who are registered in 200-H03-HR

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 0001112 0001111 | Dwight Wong |
| 0001113 0001112 | Mahatma Coate |
| 0001113 | Sandy Beech |
| 0101113 | Amanda Linn |
| 0201111 | Paddy O'Furniture |
| 9901111 | Sue Metu |
| 9901234 | Mike O'Phone |

1. What is the average high school math mark for all students admitted to Computer Science, regardless of whether Computer Science is their first, second or third choice? \_\_\_\_74.5\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 70.67

***For the Academic Dean:***

1. Give the course number, name and teacher of all courses in the ECCE department (i.e. the course number begins with 322) for the Fall, 2001 semester.

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Teacher** |
| 322H01HR | ECCE I | Polly Morphek |
| 322H03HR | ECCE III | Al Dente |
| 322H05HR | ECCE V | **Al Dente** |

1. What classes did Mary Lamm teach Ella Fant? Give the course number, name and semester.

|  |  |  |
| --- | --- | --- |
| **Course Number** | **Course Name** | **Semester** |
| 420B30HR | Programming III | F02 |
| 420D10HR | Database I | F02 |

1. How many hours a week is Sam Ovar scheduled to teach in the Winter, 2003 semester? \_\_\_12\_\_\_\_\_\_\_\_\_\_\_\_\_ 12

***For the Loan Officer:***

1. Give the student number and name of all students born before 1985 who have a student loan.

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 0201114101111 | Fanny Farmer |
| 0101111 | Dan Yell |

1. Give the student number and name of all students who have a student loan and who went to D’Arcy McGee High School.

|  |  |
| --- | --- |
| **Student Number** | **Student Name** |
| 0201113201113 | Tom Thumb |
| 99022229902222 | Sue Yu |

1. What is the average age of all students who received a student loan in 2001?\_\_31.28\_\_\_\_\_\_\_\_\_\_\_ 20.3
2. How many locations is Sue Yu’s name stored?\_\_1\_\_\_\_\_\_\_\_\_\_\_ 20.3
3. **Paper relational database Create, Updates, Deletes**

***Objectives***: Understand how to lookup/navigate data in a relational database

For each of the following use cases, explain the sequence of operations you would do to the tables, showing which table, and what row contents would be updated.

1. Change Sue Yu’s address to 99 Wandering Way

|  |  |  |
| --- | --- | --- |
| **Step** | **Action (Create, Update, Delete)** | **Table, Row** |
| **1** | **Update** | **Student\_table, 22** |
|  |  |  |
|  |  |  |

1. Change Sue Yu’s name to Susan Wu

|  |  |  |
| --- | --- | --- |
| **Step** | **Action (Create, Update, Delete)** | **Table, Row** |
| **1** | **Update** | **Student\_Table, 22** |
|  |  |  |
|  |  |  |

1. Remove 322-H02-HR from Al Dente’s workload

|  |  |  |
| --- | --- | --- |
| **Step** | **Action (Create, Update, Delete)** | **Table, Row** |
| **1** | **Delete** | **Teacher\_workload, 76** |
|  | **Delete** | **Teacher\_workload, 115** |
|  |  |  |

1. Mary Lamm will teach D10 not D20 in F01

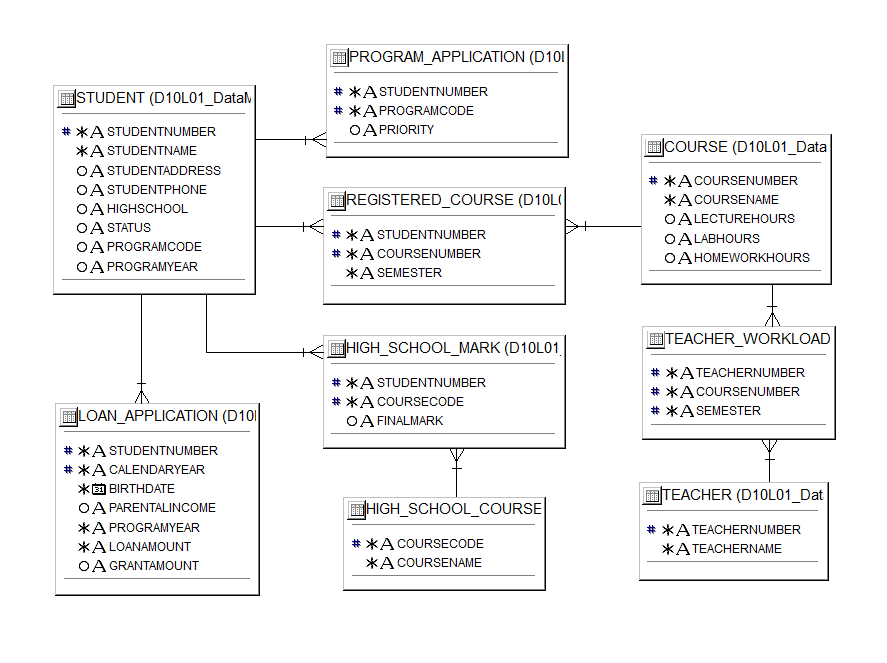
|  |  |  |
| --- | --- | --- |
| **Step** | **Action (Create, Update, Delete)** | **Table, Row** |
| **1** | **Update** | **Teacher\_Workload, 21** |
|  |  |  |
|  |  |  |

1. Remove 322-H02-HR from Al Dente’s workload

|  |  |  |
| --- | --- | --- |
| **Step** | **Action (Create, Update, Delete)** | **Table, Row** |
| **1** | **Delete** | **Teacher\_workload, 76** |
|  | **Delete** | **Teacher\_workload, 115** |
|  |  |  |

420-D10

Exercise 2 Appendix

Data Model

Tables

| **The PROGRAM Table** | |
| --- | --- |
| **ProgramCode** | **ProgramName** |
| 200 | Pure & Applied Science |
| 243 | Electronics Technology |
| 300 | Social Science |
| 322 | Early Childhood Care and Education |
| 420 | Computer Science |

| **The STUDENT Table** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student**  **Number** | **Student Name** | **Student Address** | **Student Phone** | **High School** | **Status** | **Program**  **Code** | **Program**  **Year** |
| 0001111 | Dwight Wong | 15 Birch Ave. | 555-3333 | Philemon Wright | A | 243 | 2 |
| 0001112 | Mahatma Coate | 16 Fir Ave. | 555-4444 | Philemon Wright | A | 200 | 2 |
| 0001113 | Sandy Beech | 17 Palm Row | 565-2345 | Philemon Wright | A | 200 | 2 |
| 0001114 | Jerry Atrix | 18 Walnut Way | 555-4433 | D'Arcy McGee | A | 420 | 2 |
| 0001115 | Ella Fant | 19 Elm St. | 555-0123 | Pontiac | A | 420 | 2 |
| 0001116 | Donna Hood | 20 Dahlia Dr. | 555-0122 | D'Arcy McGee | A | 300 | 2 |
| 0001117 | Carrie Mehome | 30 Maple Dr | 555-1222 | Laurentian | A | 300 | 1 |
| 0001118 | Rob Banks | 21 Birch Ave. | 555-2212 | John Paul II | A | 322 | 2 |
| 0001119 | Claire Voyant | 22 Cedar Row | 555-0221 | John Paul II | A | 322 | 1 |
| 0101111 | Dan Yell | 23 Yarrow Ave. | 555-3200 | Pontiac | A | 420 | 1 |
| 0101112 | Ivor Good | 32 Gladiola Lane | 565-3200 | Laurentian | A | 420 | 1 |
| 0101113 | Amanda Linn | 24 Lilac Lane | 555-2310 | Philemon Wright | A | 300 | 1 |
| 0101114 | Peter Piper | 25 Pansy Ave | 555-2111 | Pontiac | A | 300 | 1 |
| 0201111 | Paddy O'Furniture | 26 Oak St. | 555-2312 | Philemon Wright | P |  |  |
| 0201112 | Moe Bilhome | 27 Birch Ave | 555-1321 | Laurentian | P |  |  |
| 0201113 | Tom Thumb | 28 Tulip Way | 555-4251 | D'Arcy McGee | P |  |  |
| 0201114 | Fanny Farmer | 29 Fir Ave. | 550-2351 | John Paul II | P |  |  |
| 5551112 | Sam Sham | 32 Marigold Close | 565-3201 | D'Arcy McGee | A | 420 | 1 |
| 5551113 | Cash Carry | 32 Park Place | 565-3211 | D'Arcy McGee | P |  | 0 |
| 9901111 | Sue Metu | 13 Maple St. | 555-2222 | Philemon Wright | A | 322 | 3 |
| 9901234 | Mike O'Phone | 11 Elm St. | 555-5555 | Philemon Wright | A | 420 | 3 |
| 9902222 | Sue Yu | 14 Cedar Row | 555-2223 | D'Arcy McGee | A | 243 | 3 |
| 9904321 | Eileen Over | 12 Oak St. | 555-1111 | John Paul II | A | 420 | 3 |

| **The PROGRAM\_APPLICATION Table** | | |
| --- | --- | --- |
| **StudentNumber** | **ProgramCode** | **Priority** |
| 0001111 | 200 | 3 |
| 0001111 | 243 | 1 |
| 0001111 | 420 | 2 |
| 0001112 | 200 | 1 |
| 0001112 | 420 | 2 |
| 0001113 | 200 | 2 |
| 0001113 | 300 | 1 |
| 0001113 | 322 | 3 |
| 0001114 | 200 | 1 |
| 0001114 | 300 | 2 |
| 0001114 | 420 | 3 |
| 0001115 | 243 | 1 |
| 0001115 | 420 | 2 |
| 0001116 | 300 | 1 |
| 0001116 | 322 | 2 |
| 0001117 | 300 | 2 |
| 0001117 | 322 | 1 |
| 0001118 | 200 | 1 |
| 0001118 | 300 | 2 |
| 0001118 | 322 | 3 |
| 0001119 | 300 | 2 |
| 0001119 | 322 | 1 |
| 0101111 | 200 | 3 |
| 0101111 | 243 | 2 |
| 0101111 | 420 | 1 |
| 0101112 | 243 | 2 |
| 0101112 | 420 | 1 |
| 0101113 | 200 | 3 |
| 0101113 | 300 | 1 |
| 0101113 | 322 | 2 |
| 0101114 | 200 | 1 |
| 0101114 | 300 | 2 |
| 0201111 | 200 | 2 |
| 0201111 | 243 | 3 |
| 0201111 | 420 | 1 |
| 0201112 | 243 | 3 |
| 0201112 | 300 | 3 |
| 0201112 | 322 | 2 |
| 0201112 | 420 | 1 |
| 0201113 | 200 | 2 |
| 0201113 | 300 | 3 |
| 0201113 | 420 | 1 |
| 0201114 | 200 | 2 |
| 0201114 | 420 | 1 |
| 9901111 | 300 | 3 |
| 9901111 | 322 | 1 |
| 9901234 | 300 | 1 |
| 9901234 | 420 | 2 |
| 9902222 | 200 | 1 |
| 9902222 | 243 | 2 |
| 9904321 | 243 | 2 |
| 9904321 | 420 | 1 |

| **The HIGH\_SCHOOL\_COURSE Table** | |
| --- | --- |
| **CourseCode** | **CourseName** |
| 111 | English |
| 222 | History |
| 436 | General Math |
| 444 | General Science |
| 536 | Senior Math |
| 555 | Advanced Science |
| 987 | Phys Ed |

| **The HIGH\_SCHOOL\_MARK Table** | | |
| --- | --- | --- |
| **StudentNumber** | **CourseCode** | **Final Mark** |
| 0001111 | 111 | 87 |
| 0001111 | 536 | 70 |
| 0001111 | 987 | 98 |
| 0001112 | 111 | 87 |
| 0001112 | 536 | 60 |
| 0001112 | 987 | 70 |
| 0001113 | 111 | 97 |
| 0001113 | 536 | 61 |
| 0001113 | 987 | 70 |
| 0001114 | 111 | 60 |
| 0001114 | 536 | 75 |
| 0001114 | 987 | 87 |
| 0001115 | 111 | 62 |
| 0001115 | 536 | 61 |
| 0001115 | 987 | 60 |
| 0001116 | 111 | 72 |
| 0001116 | 536 | 78 |
| 0001116 | 987 | 95 |
| 0001117 | 111 | 93 |
| 0001117 | 536 | 92 |
| 0001117 | 987 | 80 |
| 0001118 | 111 | 88 |
| 0001118 | 536 | 81 |
| 0001118 | 987 | 86 |
| 0001119 | 111 | 76 |
| 0001119 | 536 | 66 |
| 0001119 | 987 | 70 |
| 0101111 | 111 | 72 |
| 0101111 | 536 | 68 |
| 0101111 | 987 | 91 |
| 0101112 | 111 | 87 |
| 0101112 | 536 | 70 |
| 0101112 | 987 | 77 |
| 0101113 | 111 | 71 |
| 0101113 | 536 | 87 |
| 0101113 | 987 | 67 |
| 0101114 | 111 | 62 |
| 0101114 | 536 | 63 |
| 0101114 | 987 | 97 |
| 0201111 | 111 | 88 |
| 0201111 | 536 | 85 |
| 0201111 | 987 | 70 |
| 0201112 | 111 | 78 |
| 0201112 | 536 | 46 |
| 0201112 | 987 | 67 |
| 0201113 | 111 | 76 |
| 0201113 | 536 | 69 |
| 0201113 | 987 | 87 |
| 0201114 | 111 | 75 |
| 0201114 | 436 | 67 |
| 0201114 | 987 | 65 |
| 9901111 | 111 | 66 |
| 9901111 | 536 | 70 |
| 9901111 | 987 | 72 |
| 9901234 | 111 | 70 |
| 9901234 | 536 | 78 |
| 9901234 | 987 | 79 |
| 9902222 | 111 | 74 |
| 9902222 | 536 | 75 |
| 9902222 | 987 | 76 |
| 9904321 | 111 | 70 |
| 9904321 | 536 | 72 |
| 9904321 | 987 | 88 |

| **The LOAN\_APPLICATION Table** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **StudentNumber** | **Calendar Year** | **Birthdate** | **ParentalIncome** | **Program Year** | **Loan Amount** | **Grant Amount** |
| 0001112 | 2000 | 1/1/1987 | $55,000.00 | 1 | $1,000.00 | $500.00 |
| 0001112 | 2001 | 1/1/1987 | $55,000.00 | 2 | $750.00 | $400.00 |
| 0001112 | 2002 | 1/1/1987 | $55,000.00 | 3 | $500.00 | $100.00 |
| 0001115 | 2001 | 2/2/1986 | $35,000.00 | 2 | $5,000.00 | $1,000.00 |
| 0001115 | 2002 | 2/2/1986 | $35,000.00 | 3 | $4,500.00 | $500.00 |
| 0001117 | 2002 | 3/3/1987 | $45,000.00 | 3 | $3,000.00 | $0.00 |
| 0001119 | 2000 | 3/4/1986 | $35,000.00 | 1 | $8,000.00 | $4,000.00 |
| 0001119 | 2001 | 3/4/1986 | $35,000.00 | 2 | $7,000.00 | $3,000.00 |
| 0001119 | 2002 | 3/4/1986 | $35,000.00 | 3 | $6,000.00 | $2,000.00 |
| 0101111 | 2001 | 5/1/1977 | $0.00 | 1 | $10,000.00 | $5,000.00 |
| 0101111 | 2002 | 5/1/1977 | $0.00 | 2 | $8,000.00 | $4,000.00 |
| 0201113 | 2002 | 1/6/1985 | $35,000.00 | 1 | $5,000.00 | $2,000.00 |
| 0201114 | 2002 | 1/7/1974 | $0.00 | 1 | $10,000.00 | $4,000.00 |
| 9901234 | 2001 | 8/8/1986 | $57,000.00 | 3 | $1,000.00 | $200.00 |
| 9902222 | 1999 | 9/9/1985 | $37,000.00 | 1 | $5,000.00 | $500.00 |
| 9902222 | 2000 | 9/9/1985 | $37,000.00 | 2 | $4,000.00 | $200.00 |
| 9902222 | 2001 | 9/9/1985 | $37,000.00 | 3 | $3,000.00 | $100.00 |
| 9904321 | 2000 | 10/11/1986 | $40,000.00 | 2 | $5,000.00 | $300.00 |
| 9904321 | 2001 | 10/11/1986 | $40,000.00 | 3 | $4,500.00 | $250.00 |

| **The COURSE Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Program**  **Code** | **Course**  **Number** | **Course Name** | **Lecture**  **Hours** | **Lab**  **Hours** | **Homework**  **Hours** |
| 200 | 200H01HR | Science I | 3 | 3 | 3 |
| 200 | 200H02HR | Science II | 3 | 3 | 3 |
| 200 | 200H03HR | Science III | 3 | 3 | 3 |
| 200 | 200H04HR | Science IV | 3 | 3 | 3 |
| 243 | 243H01HR | EET I | 2 | 3 | 3 |
| 243 | 243H02HR | EET II | 3 | 3 | 3 |
| 243 | 243H03HR | EET III | 2 | 3 | 3 |
| 243 | 243H04HR | EET IV | 3 | 3 | 3 |
| 243 | 243H05HR | EET V | 1 | 8 | 3 |
| 243 | 243H06HR | EET VI | 1 | 9 | 3 |
| 300 | 300H01HR | Social I | 3 | 0 | 3 |
| 300 | 300H02HR | Social II | 3 | 0 | 3 |
| 300 | 300H03HR | Social III | 3 | 0 | 3 |
| 300 | 300H04HR | Social IV | 3 | 0 | 3 |
| 322 | 322H01HR | ECCE I | 3 | 1 | 3 |
| 322 | 322H02HR | ECCE II | 3 | 2 | 3 |
| 322 | 322H03HR | ECCE III | 3 | 2 | 3 |
| 322 | 322H04HR | ECCE IV | 3 | 3 | 3 |
| 322 | 322H05HR | ECCE V | 3 | 3 | 3 |
| 322 | 322H06HR | ECCE VI | 3 | 0 | 3 |
| 420 | 420A10HR | Operating Systems | 2 | 3 | 3 |
| 420 | 420B10HR | Programming I | 3 | 3 | 3 |
| 420 | 420B20HR | Programming II | 3 | 3 | 3 |
| 420 | 420B30HR | Programming III | 3 | 3 | 3 |
| 420 | 420B40HR | Programming IV | 3 | 3 | 3 |
| 420 | 420B50HR | Programming V | 3 | 3 | 3 |
| 420 | 420C10HR | Web Programming I | 3 | 3 | 3 |
| 420 | 420D10HR | Database I | 3 | 3 | 3 |
| 420 | 420D20HR | Database II | 3 | 3 | 3 |
| 420 | 420E10HR | Systems I | 3 | 3 | 3 |
| 420 | 420E20HR | Systems II | 3 | 3 | 3 |
| 420 | 420E30HR | Systems III | 3 | 3 | 3 |
| 420 | 420E40HR | Systems IV | 3 | 3 | 3 |

| **The TEACHER Table** | |
| --- | --- |
| **TeacherNumber** | **TeacherName** |
| 100 | Salton Pepper |
| 150 | Sal Monella |
| 200 | PollyEsther Doublenitz |
| 300 | John Doe |
| 400 | Marvin Smythe |
| 500 | Ella Mentary |
| 600 | Polly Morfek |
| 700 | Al Dente |
| 800 | Mary Lamm |
| 900 | Hardy Mums |
| 950 | Sam Ovar |

| **The REGISTERED\_COURSE Table** | | |
| --- | --- | --- |
| **StudentNumber** | **CourseNumber** | **Semester** |
| 0001111 | 243-H03-HR | F02 |
| 0001112 | 200-H03-HR | F02 |
| 0001113 | 200-H03-HR | F02 |
| 0001114 | 420-B30-HR | F02 |
| 0001114 | 420-D10-HR | F02 |
| 0001114 | 420-E10-HR | F02 |
| 0001115 | 420-B30-HR | F02 |
| 0001115 | 420-D10-HR | F02 |
| 0001115 | 420-E10-HR | F02 |
| 0001116 | 300-H03-HR | F02 |
| 0001117 | 300-H01-HR | F02 |
| 0001118 | 322-H03-HR | F02 |
| 0001119 | 322-H01-HR | F02 |
| 0101111 | 420-B10-HR | F02 |
| 0101112 | 420-B10-HR | F02 |
| 0101113 | 300-H01-HR | F02 |
| 0101114 | 300-H01-HR | F02 |
| 5551112 | 420-A10-HR | F02 |
| 5551112 | 420-B10-HR | F02 |
| 5551112 | 420-C10-HR | F02 |
| 9901111 | 322-H04-HR | F02 |
| 9901234 | 420-B50-HR | F02 |
| 9901234 | 420-E30-HR | F02 |
| 9902222 | 243-H05-HR | F02 |
| 9904321 | 420-B50-HR | F02 |
| 9904321 | 420-E30-HR | F02 |

| **The TEACHER\_WORKLOAD Table** | | |
| --- | --- | --- |
| **TeacherNumber** | **CourseNumber** | **Semester** |
| 950 | 420E10HR | F00 |
| 900 | 420B30HR | F00 |
| 900 | 420B50HR | F00 |
| 300 | 243H03HR | F00 |
| 800 | 420B10HR | F00 |
| 400 | 243H05HR | F00 |
| 400 | 243H01HR | F00 |
| 700 | 322H05HR | F00 |
| 800 | 420D10HR | F00 |
| 500 | 300H01HR | F00 |
| 700 | 322H01HR | F00 |
| 600 | 322H03HR | F00 |
| 100 | 200H01HR | F00 |
| 500 | 300H03HR | F00 |
| 150 | 420E30HR | F00 |
| 200 | 200H03HR | F00 |
| 700 | 322H03HR | F01 |
| 500 | 300H01HR | F01 |
| 700 | 322H05HR | F01 |
| 300 | 243H05HR | F01 |
| 800 | 420B10HR | F01 |
| 800 | 420D10HR | F01 |
| 600 | 322H01HR | F01 |
| 400 | 243H01HR | F01 |
| 500 | 300H03HR | F01 |
| 150 | 420E30HR | F01 |
| 100 | 200H03HR | F01 |
| 300 | 243H03HR | F01 |
| 900 | 420B50HR | F01 |
| 900 | 420B30HR | F01 |
| 200 | 200H01HR | F01 |
| 950 | 420E10HR | F01 |
| 400 | 243H03HR | F02 |
| 150 | 420E10HR | F02 |
| 600 | 322H05HR | F02 |
| 500 | 300H01HR | F02 |
| 100 | 200H03HR | F02 |
| 700 | 322H01HR | F02 |
| 200 | 200H01HR | F02 |
| 800 | 420B10HR | F02 |
| 300 | 243H05HR | F02 |
| 950 | 420B50HR | F02 |
| 500 | 300H03HR | F02 |
| 600 | 322H03HR | F02 |
| 800 | 420D10HR | F02 |
| 950 | 420E30HR | F02 |
| 300 | 243H01HR | F02 |
| 800 | 420B30HR | F02 |
| 100 | 200H01HR | F99 |
| 500 | 300H03HR | F99 |
| 200 | 200H03HR | F99 |
| 600 | 322H01HR | F99 |
| 950 | 420E30HR | F99 |
| 700 | 322H03HR | F99 |
| 400 | 243H03HR | F99 |
| 900 | 420B30HR | F99 |
| 900 | 420B50HR | F99 |
| 800 | 420D10HR | F99 |
| 300 | 243H01HR | F99 |
| 500 | 300H01HR | F99 |
| 800 | 420B10HR | F99 |
| 400 | 243H05HR | F99 |
| 600 | 322H05HR | F99 |
| 950 | 420E10HR | F99 |
| 200 | 200H02HR | W00 |
| 200 | 200H04HR | W00 |
| 400 | 243H06HR | W00 |
| 300 | 243H04HR | W00 |
| 400 | 243H02HR | W00 |
| 500 | 300H02HR | W00 |
| 600 | 322H04HR | W00 |
| 600 | 322H06HR | W00 |
| 800 | 420D20HR | W00 |
| 500 | 300H04HR | W00 |
| 800 | 420B20HR | W00 |
| 700 | 322H02HR | W00 |
| 900 | 420E40HR | W00 |
| 950 | 420E20HR | W00 |
| 900 | 420B40HR | W00 |
| 900 | 420B40HR | W01 |
| 800 | 420D20HR | W01 |
| 100 | 200H02HR | W01 |
| 900 | 420E40HR | W01 |
| 400 | 243H02HR | W01 |
| 300 | 243H04HR | W01 |
| 200 | 200H04HR | W01 |
| 950 | 420E20HR | W01 |
| 800 | 420B20HR | W01 |
| 600 | 322H02HR | W01 |
| 500 | 300H04HR | W01 |
| 600 | 322H06HR | W01 |
| 300 | 243H06HR | W01 |
| 700 | 322H04HR | W01 |
| 500 | 300H02HR | W01 |
| 500 | 300H02HR | W02 |
| 300 | 243H04HR | W02 |
| 100 | 200H02HR | W02 |
| 600 | 322H02HR | W02 |
| 700 | 322H06HR | W02 |
| 950 | 420E40HR | W02 |
| 950 | 420B40HR | W02 |
| 150 | 420E20HR | W02 |
| 500 | 300H04HR | W02 |
| 100 | 200H04HR | W02 |
| 700 | 322H04HR | W02 |
| 800 | 420D20HR | W02 |
| 400 | 243H02HR | W02 |
| 800 | 420B20HR | W02 |
| 300 | 243H06HR | W02 |
| 700 | 322H06HR | W03 |
| 150 | 420E20HR | W03 |
| 800 | 420B20HR | W03 |
| 950 | 420B40HR | W03 |
| 950 | 420E40HR | W03 |
| 700 | 322H02HR | W03 |
| 600 | 322H04HR | W03 |
| 800 | 420D20HR | W03 |
| 100 | 200H04HR | W03 |
| 300 | 243H04HR | W03 |
| 200 | 200H02HR | W03 |
| 500 | 300H02HR | W03 |
| 400 | 243H02HR | W03 |
| 400 | 243H06HR | W03 |