SELECT name

FROM instructor

WHERE dept\_name = 'Biology';

+----------+

| name |

+----------+

| Queiroz |

| Valtchev |

+----------+

SELECT title

FROM course

WHERE dept\_name = 'Comp. Sci.' AND credits = 3;

+-----------------------+

| title |

+-----------------------+

| International Finance |

| Computability Theory |

| Japanese |

+-----------------------+

SELECT c.course\_id, c.title

FROM course c

JOIN takes t ON c.course\_id = t.course\_id

WHERE t.ID = '63310';

+-----------+--------------------+

| course\_id | title |

+-----------+--------------------+

| 105 | Image Processing |

| 158 | Elastic Structures |

| 338 | Graph Theory |

| 400 | Visual BASIC |

| 468 | Fractal Geometry |

| 489 | Journalism |

| 599 | Mechanics |

| 694 | Optics |

| 864 | Heat Transfer |

| 959 | Bacteriology |

| 972 | Greek Tragedy |

+-----------+--------------------+

SELECT SUM(c.credits)

FROM course c

JOIN takes t ON c.course\_id = t.course\_id

WHERE t.ID = '63310';

+----------------+

| SUM(c.credits) |

+----------------+

| 39 |

+----------------+

SELECT t.ID, SUM(c.credits) AS total\_credits

FROM takes t

JOIN course c ON t.course\_id = c.course\_id

GROUP BY t.ID

HAVING COUNT(\*) > 0;

+-------+---------------+

| ID | total\_credits |

+-------+---------------+

| 1000 | 47 |

| 10033 | 71 |

| 10076 | 46 |

| 1018 | 82 |

| 10204 | 40 |

| 10267 | 38 |

| 10269 | 36 |

| 10454 | 61 |

| 10481 | 62 |

| 10527 | 73 |

| 10556 | 38 |

| 10663 | 63 |

| 10693 | 46 |

| 107 | 86 |

| 10705 | 59 |

| 10727 | 55 |

| 10736 | 41 |

| 108 | 56 |

| 1080 | 47 |

| 10814 | 57 |

| 10834 | 74 |

…...

There are 2000 lines so I’m adding only the first few

SELECT DISTINCT s.name

FROM student s

JOIN takes t ON s.ID = t.ID

JOIN course c ON t.course\_id = c.course\_id

WHERE c.dept\_name = 'Comp. Sci.';

+-------------------+

| name |

+-------------------+

| Colin |

| Mediratta |

| Shabuno |

| Jr |

| Saito |

| Yamashita |

| Rakoj |

| Mendelzon |

| Stone |

| Sin |

| Alqui |

| Wolter |

| Sommerfeldt |

| Berger |

| Oswald |

| Miao |

| Whitley |

| Ramadan |

| Singhal |

| Arinb |

| Anis |

There are 866 lines so I’m only adding the first few

SELECT i.ID

FROM instructor i

LEFT JOIN teaches t ON i.ID = t.ID

WHERE t.ID IS NULL;

+-------+

| ID |

+-------+

| 31955 |

| 57180 |

| 16807 |

| 4034 |

| 63395 |

| 79653 |

| 72553 |

| 50885 |

| 59795 |

| 58558 |

| 74426 |

| 96895 |

| 97302 |

| 52647 |

| 35579 |

| 37687 |

| 64871 |

| 78699 |

| 95030 |

+-------+

SELECT i.ID, i.name

FROM instructor i

LEFT JOIN teaches t ON i.ID = t.ID

WHERE t.ID IS NULL;

+-------+-------------------+

| ID | name |

+-------+-------------------+

| 16807 | Yazdi |

| 31955 | Moreira |

| 35579 | Soisalon-Soininen |

| 37687 | Arias |

| 4034 | Murata |

| 50885 | Konstantinides |

| 52647 | Bancilhon |

| 57180 | Hau |

| 58558 | Dusserre |

| 59795 | Desyl |

| 63395 | McKinnon |

| 64871 | Gutierrez |

| 72553 | Yin |

| 74426 | Kenje |

| 78699 | Pingr |

| 79653 | Levine |

| 95030 | Arinb |

| 96895 | Mird |

| 97302 | Bertolino |

+-------+-------------------+