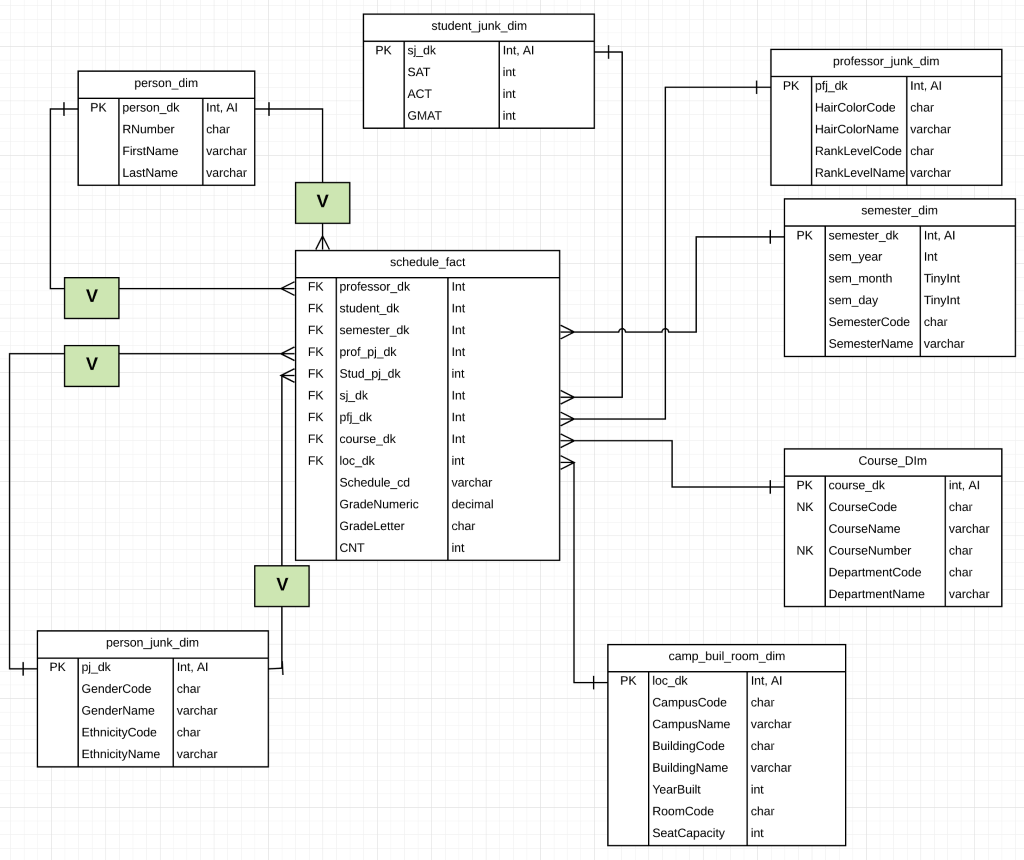
Group 5 Name(s): Hien Nguyen, Reese Gregory, Andrew Thornton, Robert Fernandez

ISQS 3358-001

GIC #1

October 4th, 2019

1. **Database Table Design**



1. **SQL queries**
   1. select distinct concat(FirstName, ‘ ‘, LastName) as Professor\_Name

from person\_dim pd

inner join schedule\_fact sf on pd.person\_dk = sf.student\_dk

where person\_dk in (select professor\_dk from schedule\_fact);

1. select concat(SemesterName, ‘ ‘, sem\_year) as Semester,

(count(course\_dk)/count(distinct(student\_dk))) as AvgCoursesTaken

from schedule\_fact sf, semester\_dim sd

where sf.semester\_dk = sd.semester\_dk

group by Semester;

1. select sf.loc\_dk, concat(sd.SemesterName, ‘ ‘, sd.sem\_year) as Semester,

(sum(sf.cnt)/ld.SeatCapacity) as RoomUtilization,

ld.RoomCode, ld.BuildingName

from schedule\_fact sf

inner join location\_dim ld on sf.loc\_dk = ld.loc\_dk

Inner join semester\_dim sd on sf.semester\_dk = sd.semester\_dk

group by sf.loc\_dk, Semester, ld.BuildingName, ld.RoomCode

order by Semester;

1. **Statement of Granularity for the fact tables**

One row per individual student performance rating in each course taken every semester.

1. **Statement of Dimensional History applied to each dimension table**

Type 0: N/A

Type 1: student\_junk\_dim, professor\_junk\_dim, person\_junk\_dim

Type 2: camp\_buil\_room\_dim, person\_dim, course\_dim

Type 3: N/A