\*red means primary key

Many-to-manty relation: Student-CourseOffering One-to-many relation:

> Couser-CourseOffering CourseOffering-CalendarCourseOffering Student-Attendance CalendarCourseOffering-Attendance

# StudentClassOffering

Student

student\_id : int courseoffering\_id: int

student id: int first name: String last\_name : String

email : String status: String

void deleteAll();

String last name);

List<Student> getStudent();

void insertStudent(Student student);

void updateStudent(Student student); void deleteStudent(Student student);

Student getByID(int studentID);

List<Student> getByName(String first\_name,

insertStudentAndClassOffering(StudentClassOffering studentClassOffering);

void

deleteStudentAndClassOffering(StudentClassOffering studentClassOffering);

List<Student> getStudentByClassOfferingID(int courseOfferingID);

List<CourseOffering> getClassOfferingByStudentID(int id);

int course id

String class\_name boolean status int number\_offerings

List<CourseOffering> getCourseOfferingByCourseID(int courseID); List<CourseOffering> getCourseOffering();

Course

void insertClassOffering(CourseOffering classOffering);

void updateClassOffering(CourseOffering classOffering);

void deleteClassOffering(CourseOffering classOffering);

## CourseOffering

## int cid(CouserOffering\_id)

int course\_id;

String classroom;

int studentNum;

List<CourseOffering> getCourseOffering();

List<CourseOffering> getCourseOfferingByCourseID(int courseID);

void insertClassOffering(CourseOffering classOffering); void updateClassOffering(CourseOffering classOffering); void deleteClassOffering(CourseOffering classOffering);

## Attendance

int student\_id; int courseOffering\_id; Date date;

boolean attend;

void insertAttendance(Attendance attendance); void deleteAttendance(Attendance attendance); void updateAttendance(Attendance attendance); Boolean getAllAttendanceByStudentIDDateCourseOffering(Date date, int student\_id, int courseOffering\_id); List<Integer> getAttendPerformanceByTime(Date start, Date end, int

courseOffering\_id);

## CalendarCourseOffering

## Date date int courseOffering\_id

void insertCalendar(CalendarCourseOffering calendar); void deleteCalendar(CalendarCourseOffering calendar); List<Date> getCalendarByCourseOfferingID(int courseOfferingID);

List<CourseOffering> getCourseOfferingByDate(Date date);