341 Relational Schemas for the ER Diagram

 □ Represents Entity-Set Schema. ◇ Represents Relationship-Set Schema. _ Underlined attributes represent "key" attributes which are crucial to differentiating one set from another.
Note: In the ER Diagram, any sets with double sided borders represent "Weak Entity-Sets". This means that they do not have any key attributes which would make them necessarily unique.
♦ Contains(classNumber, lectureSectionNumber, labSectionNumber, tutorialSectionNumber)
— Labaratan /lab Castian Number in atmost avNames days times
□ Laboratory(<u>labSectionNumber,</u> instructorName, days, times, location)
location) □ Lecture(<u>lectureSectionNumber,</u> instructorName, days, times,
location)
location) □ Lecture(<u>lectureSectionNumber,</u> instructorName, days, times, location) □ Tutorial(<u>tutorialSectionNumber,</u> instructorName, days, times,
location) □ Lecture(<u>lectureSectionNumber,</u> instructorName, days, times, location) □ Tutorial(<u>tutorialSectionNumber,</u> instructorName, days, times, location)
location) □ Lecture(lectureSectionNumber, instructorName, days, times, location) □ Tutorial(tutorialSectionNumber, instructorName, days, times, location) ◇ MemberOf(classNumber, lectureSectionNumber,
location) □ Lecture(lectureSectionNumber, instructorName, days, times, location) □ Tutorial(tutorialSectionNumber, instructorName, days, times, location) ◇ MemberOf(classNumber, lectureSectionNumber, labSectionNumber, tutorialSectionNumber) □ Course(classNumber, courseTitle, description, waitlist, capacity,

Uses(<u>builtScheduleID</u> , term, courseList, days, times, numberOfCourses, constraints, completedCourses, academicRequirements) ???
□ User_Preferences(days, times, numberOfCourses, constraints)
□ Student_Record(completedCourses, academicRequirements)
□ Schedule_Builder(<u>builtScheduleID</u>)
□ Optimized_Sequence(<u>optimizedScheduleID</u>)
♦ Optimizes(builtScheduleID, optimizedScheduleID)
♦ Initiates(builtScheduleID, studentID, facultyID)
□ Teacher(<u>facultyID</u> , teacherName, courseHistory, courseList)
□ Student(<u>studentID</u> , studentName, programOfStudy, academicRecord)
♦ IsAccountOwner(netname, studentID, facultyID)
□ User(<u>netname</u> , password)