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Introduction

International SI Program History

- Developed in 1973 by Deanna C. Martin, Ph.D. at the University of Missouri-Kansas City in response to high attrition rates in historically difficult science courses.
- Based on non-remedial approach to learning to increase student performance and retention.

UHD Program History

- In 2000, UHD implemented its own SI program following the traditional UMKC model.
- Student demand and awareness has consistently increased.

Overview

- Goal: to improve understanding of course material.
- Targets historically difficult courses:
 - High rates of D, F, or withdrawal
 - Ex: BIOL, CHEM, PHYS, MATH, and HIST
- Peer facilitated weekly sessions
- Provided free of charge to all students

SI Leaders

Qualifications

- Minimum 3.0 cumulative GPA
- Earned grade of B or higher in selected course
- Effective communication skills
- Capacity to work with students with diverse backgrounds

Requirements

- Attend mandatory SI training prior to semester
- Act as a student model in the classroom
- Facilitate two 60-minute study sessions per week
- Devote 1-2 hours per week to plan activities and exam reviews
- Meet with course professor and coordinator periodically

Team Based Learning Model

- Students of diverse backgrounds are placed in permanent teams
- Prior to class, students are expected to complete a reading assignment following a detailed reading guide (provided by instructor)
- Student will take a RAP (Readiness Assurance Process) to test their knowledge of reading material
- The RAP consists of two assessments:
 - iRAT: Individual, closed book
 - tRAT: team-based, closed book, open discussion
- Based on RAP performance, instructor will tailor a mini-lecture towards troublesome concepts
 - Content is covered on the basis of learning outcomes
- Group application activities based on lecture topics
- Formal TBL courses at UHD: Biology 1301 & 1302 and Chemistry 1307 & 1308

Role of SI in the TBL Model

In the classroom:

- SI leaders are an extension of the instructor during class
- SI leaders must be knowledgeable of class activities, learning outcomes, and course materials
- SI leaders aid in the understanding of course content during application activities
- SI leaders work with groups to facilitate active discussion

During the study sessions:

- During SI sessions, students work in a collaborative setting to review learning outcomes and application activities
- Sessions are not meant to be re-lecture but rather further the understanding of concepts through peer learning
- SI leaders model effective study skills and time management

Results

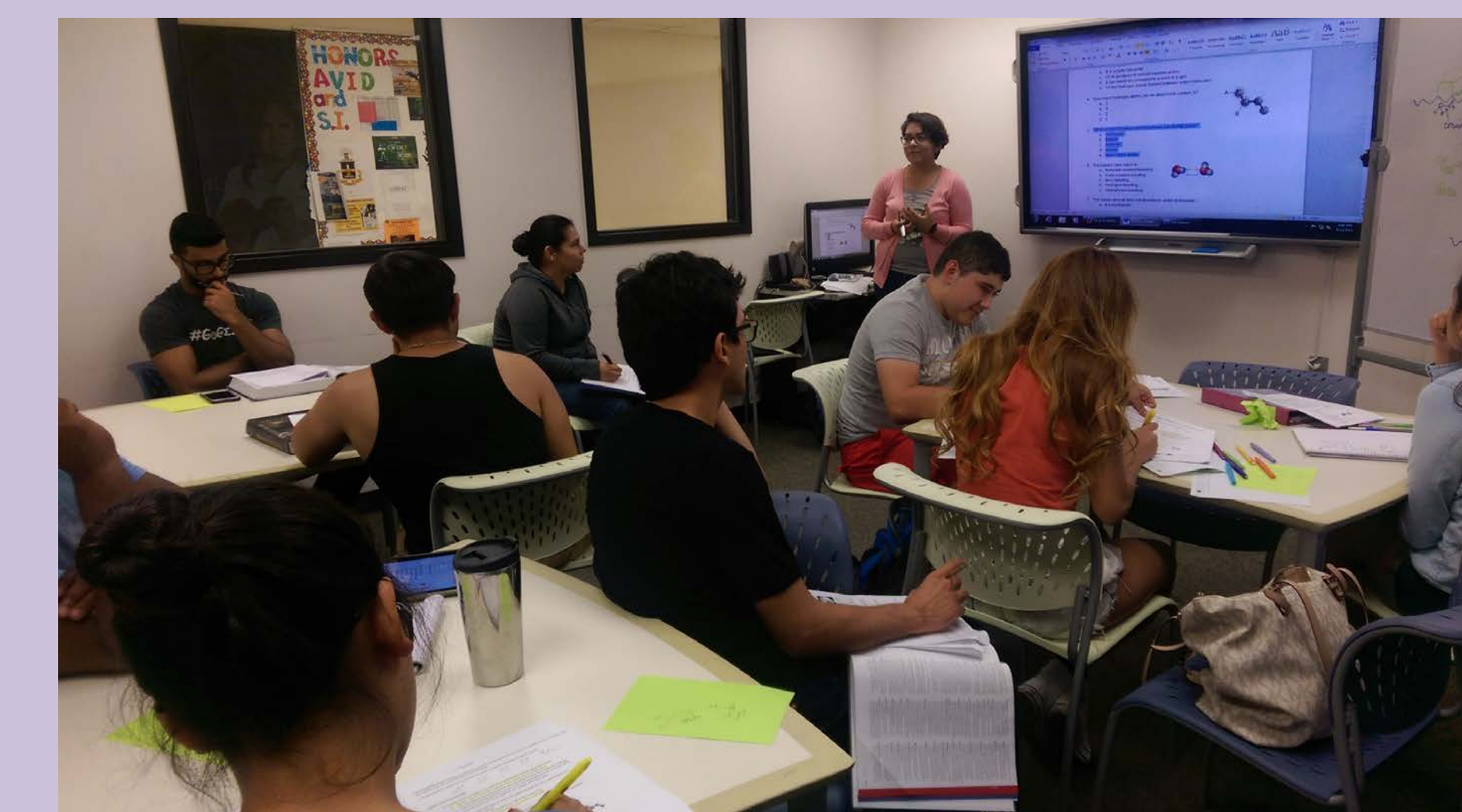
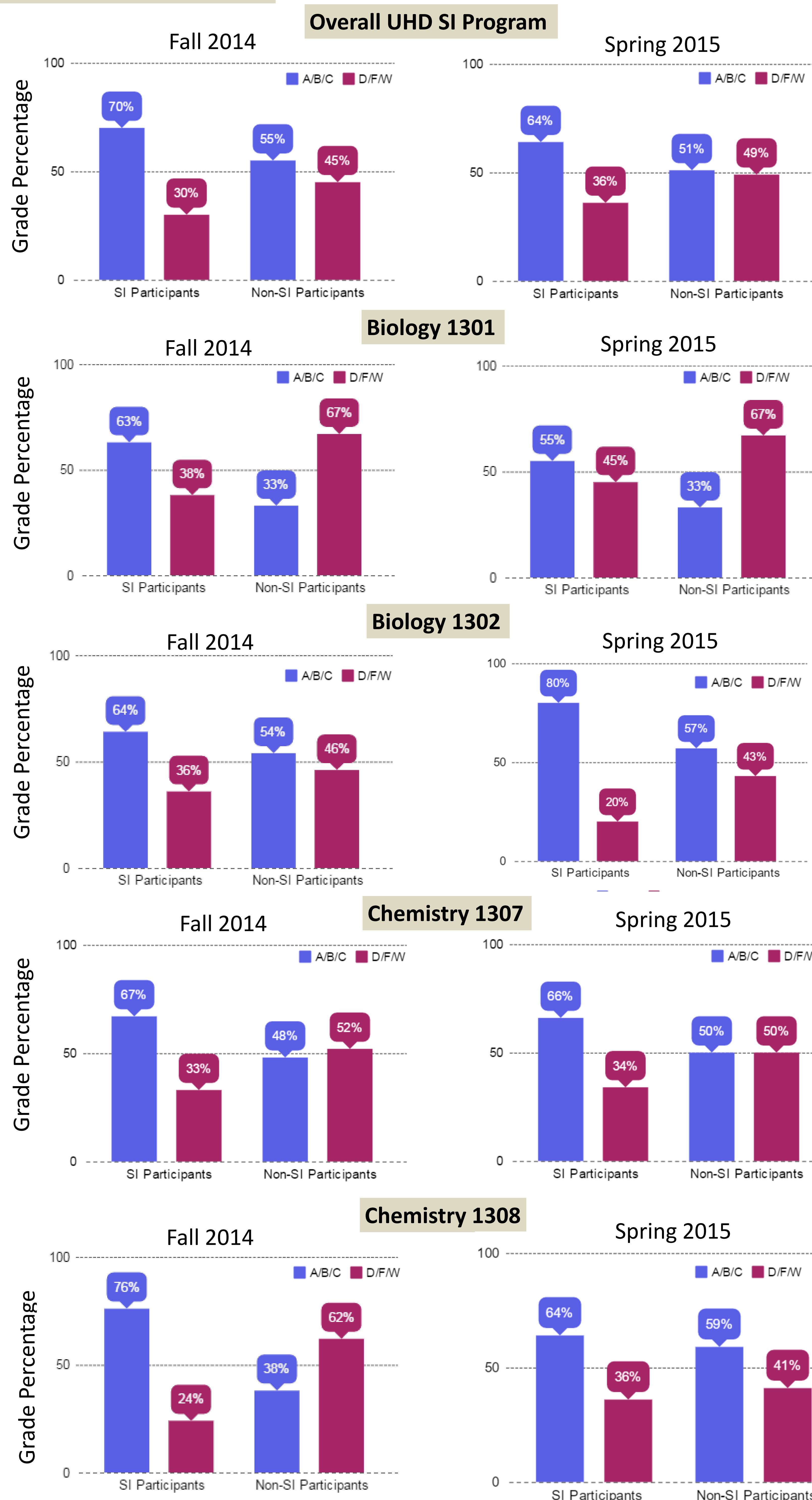


Figure 1. SI leader *Evelyn Valdez* hosting a BIOL 1301 exam review session (Fall 2015).

Study Sessions

- Informal – free and no appointment necessary
- Planned based on the majority of students' availability
- Sessions are offered online, evenings, and weekends in addition to various times of the day
- Open study hours on Fridays



Figure 2. SI leader *Brittani Duncan* hosting a BIOL 1301 final exam review session in the TBL classroom (Fall 2015).

Testimonials

"The SI is awesome and made me feel like I could ask her anything"

"Helpful to answer my in-class questions"

"The SI was very helpful always walked around making sure we understood the concepts and activities"

Future Directions

- Continue to improve passing grades and reduce withdrawal through collaborative learning and peer instruction
- Implement TBL model in other courses such as Math, History, and Physics
- Expand the SI program services to other courses
- Offer SI to more upper level courses (Sophomore and Junior level)



Figure 3. SI leader *Ashley Moreno-Gongora* hosting a CHEM 1307 final exam review session (Fall 2015).