

Skaggs School of Pharmacy and Pharmaceutical Sciences

Team-Based Learning (TBL) Program

Introduction

The SSPPS curriculum during the second year has a significant portion of time devoted to team-based learning (TBL).¹ Modifications to the traditional TBL method were made to meet the needs of the SSPPS students and structure of the curriculum. The TBL program is integrated into the biomedical curriculum and designed to support pharmacy students' long-term retention of each block's course objectives through frequent and spaced assessments of student performance.^{2,3} Students are expected to come to class prepared, having mastered the basic concepts delivered in lecture. Class time is dedicated to assuring that students achieve competency in the biomedical concepts presented in lecture and are able to apply them to integrated problems and pharmacy applications. Students actively work together in teams, assimilating knowledge, solving problems, and teaching one another. This type of active learning helps students develop the critical thinking and communication skills as well as the problem-solving and professional team skills necessary to become competent pharmacists.

A. TBL Co-Chairs/Instructors

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B. General Schedule

The TBL program runs throughout all of the SSPPS blocks in the second year and will occur on Tuesdays and Fridays, 10:00 a.m. -11:50 a.m.

C. Major Goals of SSPPS TBL Sessions

The major goals of the TBL program are to:

- identify students who need extra help and support their learning with timely feedback.
- reinforce/review block learning objectives.
- facilitate the long-term retention of fundamental biomedical science principles.
- extend the material to clinical/pharmacy applications.
- develop critical thinking and problem solving skills.
- promote communication, interpersonal, and teamwork skills.

D. Structure of TBL Sessions

Before Class

Prior to the beginning of each TBL session, students will receive a list of block lecture topics to study. Students are responsible for mastering the learning objectives for these selected topics before coming to class and need to come to the TBL sessions prepared to take a short quiz over the material they have studied.

During Class

The students take a short quiz as the first in-class activity. The quiz consists of constructed response (e.g., fill-in-the-blank, short answer) and extended-matching questions on the TBL instructor-selected topics. These quizzes are turned in and the TBL instructors immediately discuss the answers with the class.

The students will then work on a different, more challenging team activity. The discussion required to choose the team answers both serves as a review of the material from the week and allows the students to learn from each other. After the students turn in the team activity, the instructors will lead an interactive discussion about the answers and address any topics or questions the teams are unclear about.

During some sessions, lectures will be given to introduce new material that extends the block material into pharmacy applications. Specific learning objectives and drug lists from these lectures will be provided. **This material will be included in the “TBL questions” that will represent a portion of the block exams.**

After Class

The instructors will grade the individual quizzes and team activities. The quiz scores will be emailed and students who perform below a competent level will be required to meet with the instructors to address specific deficiencies and discuss strategies to improve performance. If a team has consistently low performance or does not seem to be able to function effectively, then the whole team may be required to meet with the instructors and discuss strategies to improve their performance.

E. Attendance

Students must attend all sessions on time and actively participate. If you know you are going to be unable to make a session, you need to contact us in advance to let us know. Missed sessions must be made up, as specified by the course instructors. Unexcused absences are considered to be unprofessional behavior and will be reported to the Associate Deans of Student Affairs and Academic Affairs. Excessive absences may result in failure of the block.

F. Team Functioning

One of the goals of the TBL program is for students to become more effective team members. Students are encouraged to adopt the following behaviors to enhance team functioning and learning:

- Arrive on time and remain with team during activities
- Demonstrate a good balance of active listening & participation
- Ask useful or probing questions
- Be well prepared for team activities
- Identify limits of personal knowledge
- Be clear when explaining things to others
- Give useful feedback to others
- Accept useful feedback from others
- Show respect for the opinions and feelings of others

References

1. Team-Based Learning for Health Professions Education A Guide to Using Small Groups for Improving Learning. Eds. Larry K. Michaelsen , Dean X. Parmelee , Kathryn K. McMahon, Ruth E. Levine (2007) Sterling, VA: Stylus Publishing
2. Larson DP, Butler AC, Roediger HL. Repeated testing improves long-term retention relative to repeated study: a randomized controlled trial. *Med Educ* 2009; 43:1174-1181.
3. Larson DP, Butler AC, Roediger HL. Test-enhanced learning in medical education. *Med Educ* 2008; 42:959-966.