

Biomanufacturing Kit Module 1 Syllabus

New Employee Onboarding: Training, Regulations, Career Exploration

Please Note: These assignments are designed to be flexible. They may be taught in the classroom or assigned as homework – or half and half. All documents are provided as ‘.doc’ or ‘.ppt’ so that teachers can download them and modify them to suit their curriculum, classroom, student population etc

1. Introduction to Biomanufacturing: Module 1, Lesson 1
 - a. Insulin or Vaccine Story line and Question Board
 - b. Overview of Biomanufacturing
 - c. Introduction to Biomanufacturing slide deck
2. New Hire Onboarding: Module 1, Lesson 2
 - a. All students read: PPP New Hire Welcome Document
 - b. Production Teams are Created

Team size can be somewhat flexible to suit teacher/class organization needs. Possible choices include:

 - Teams of 5
 - Teams of 4 – The teacher takes on the Quality Assurance Technician role for all teams.

(Please note: Teams must be at least 4 students in size. Smaller team size will result in a greater number of teams/class, which then results in a need for more reagents and consumables. The SBE budget is limited, which limits the amount of reagents and consumables we can supply per teacher.)

- c. Each team creates a team name and a team logo
3. New Hire Training: Module 1, Lesson 3
 - a. Lab Safety
 - i. Lab Safety slide deck (if desired)
 - ii. lab mapping activity
 - b. Introduction to the FDA - video and questions
 - c. Introduction to GMP - card sort
 - d. Each team fills out the applicable parts of the Team Training Record.
4. Job Assignments: Module 1, Lesson 4
 - a. Teams receive job assignments

Team job/role assignment methods can be flexible. Students are sometimes absent for various reasons, so teachers have suggested

flexibility with selection/assignment of team roles. Possible choices include:

- Each student is assigned one role and keeps that role throughout the kit curriculum.
 - Student roles are assigned daily and change from day to day.
 - Each student is assigned a primary role and different back-up role.
- b. Each team member reads their job description
 - c. Team members share information about their job assignment with other team members
 - d. Career Exploration assignment (Option #1 or #2)
 - e. Each team fills out a Team Role Record.
5. Standard Operating Procedure (SOP) Training: Module 1, Lesson 5
- a. New Hire Training - Importance of SOPs (can be done as a class)
 - b. Micropipetting SOP assignment
- Alternatively teachers can use this time to introduce students to SOPs and have them create SOPs in a later module after they have had some experience using SOPs.
- c. Each team finishes filling out the Team Training Record
6. Finish design of Team Logo