

Laboratory Quality Systems
Unit IV – Laboratory Management
Week 9 -10 Activities

Learning Objectives

- Understand the use of laboratory management principles including the adoption of a technology strategy and capital budgeting
- Understand the importance of implementing safety procedures and ensuring compliance with safety procedures in the laboratory

Presentations

Managing Laboratory Processes

- ☐ [Laboratory Management: An Overview](#) (10 min) | [PDF](#)
- ☐ [Technology Strategy](#) (16 min) | [PDF](#)
- ☐ [Benchmarking](#) (16 min.) | [PDF](#)
- ☐ [Capital Budgeting](#) (22 min) | [PDF](#)
- ☐ [Working Capital](#) (21 min) | [PDF](#) | [Working Capital Excel File](#)
- ☐ [Enterprise Budgeting](#) (6 min) | [PDF](#)
- ☐ [An Overview of the OTSC Lab Flexible Funding Model](#) (18 min.) | [PDF](#)
- ☐ [Texas Adoption of LFFM Grant Work – Presentation by Ms. Mary Sasser & Ms. Diamond Percival](#) (36 min.) | [PDF](#)

Excel Worksheets

- ☐ [Example Enterprise Budget File](#)
- ☐ [LFFM Capital Budget File](#)
- ☐ [LFFM Net Present Value Calculation Example](#)

Readings

Managing Laboratory Processes (OTSC Lab Flexible Funding Model)

- ☐ [Chapter 5: Technology and Competitive Advantage](#) (Porter 1985)

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- ☐ [Chapter 6: Making Investment Decisions with the Net Present Value Rule](#)
(Brealey & Meyers 2000)

- ☐ [OTSC LFFM Proposal –Skim](#)

References

- ☐ [Calculating Costs: How a LIMS-based cost recovery model can improve operational efficiencies and resource utilization](#)

- ☐ [The 2024 Spectroscopy Employment Survey: Continuing Economic Pressures, and How It Impacts Spectroscopists](#)

Safety Procedures in Laboratory

- ☐ [Strengthening a Culture of Laboratory Safety](#) by CDC (1 hr.)

- ☐ [Research Compliance: video presentation by Dr. Bruce Whitney](#) (24 min.)

- ☐ [Safety at the OTSC by Ms. Emma Gorishek](#) (6 min.)

Readings

Safety Procedures in Laboratory

- ☐ [Toolbox Talk: Safety Data Sheets from University of Missouri](#)

- ☐ [Lab Safety Matters](#) (Nature Methods 2010)

References

Safety Procedures in Laboratory

- ☐ [OTSC Lab Safety Manual](#)

Assignments

- ☐ [Homework 6 by Midnight on Monday, April 7, 2025 \(10 pts\)](#)
Submit via e-mail to outreach@otsc.tamu.edu

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- ☐ Graded Discussion # 6 on Monday April 14, 2025
Why should laboratories implement a continuous improvement program as part of their laboratory quality management system? What are some performance measures that can be used as benchmarks within a continuous improvement program?
Submit in course Google Group under Graded Discussion #6 Thread;