

Overview

This course provides a clear and structured starting point for scientists and technical staff with little or no experience in bioassays. It is designed for those who need to understand what bioassays are, why they are used, and how they support the development and lifecycle management of biological products.

Participants will gain a foundational understanding of the role of bioassays in demonstrating the biological activity of complex molecules, particularly biopharmaceuticals. The course explains why bioassays are necessary in addition to physicochemical testing. It introduces key assay formats, workflows, data relationships, and where they are used across the product lifecycle.

The training also introduces bioassay data: how dose-response relationships are generated, what typical variability looks like, and how basic statistical approaches are applied to interpret results.

Course Structure

Module	Subject Area
Module 1	Foundations of bioassays: definitions, purpose and why they are required for biological products; where bioassays fit in the product lifecycle (research, development, CMC, QC)
Module 2	Overview of bioassay formats: cell-based, receptor-binding and enzymatic assays, and how they are applied
Module 3	Potency vs content: understanding the difference, and the concept of relative potency and how it is calculated
Module 4	Introduction to dose-response curves, basic curve fitting and data visualisation
Module 5	Understanding sources of variability and assay precision
Module 6	Regulatory expectations for bioassays and how they underpin product claims, with case examples of typical bioassays used in development and release testing

Audience

Those who are new to bioassays or have little to no prior experience with them. It is ideal for those who need a solid, practical foundation before moving on to more advanced or applied bioassay training.

Duration and Delivery

This is a one-day, six module course that can be delivered either in person or remotely. The content can be tailored to the client's specific bioassay platforms, products or areas of interest if requested. This pairs well with the advanced version of this course.

contactus@greyrigge.com to discuss your training.

www.greyrigge.com