

# Diagnostics' Role In Medicine Today

41-MINUTE ONLINE CLASS | LEVEL 1

## OVERVIEW

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**Diagnostics' Role In Medicine Today** introduces the ever-expanding molecular diagnostics industry. Diagnostics save lives by helping to pinpoint the exact cause and location of disease. Learn the purpose of each type of diagnostic, the science behind personalized medicine, and how companion diagnostics help doctors prescribe medication and dosage correctly the first time. If you are new to this area of health care, Diagnostics' Role in Medicine Today will provide a solid foundation on which to build your diagnostic acumen.

### Five Takeaways:

1. Cite how biomarkers are used in molecular diagnostics.
2. Describe the types of measurements employed by diagnostics.
3. Identify the main purposes of each diagnostic category.
4. Explain how companion diagnostics take advantage of a patient's genetic variation.
5. Connect diagnostics to improved disease treatment through personalized medicine.

## AGENDA

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- **Defining Diagnostics** explains how biomarkers are used in molecular diagnostics to measure patient body chemistry and function that may or may not lead to disease.
- **Uses of Diagnostics** explains how diagnostics are used in health care today. Purposes include screening, diagnosis, prognosis, drug selection, drug treatment, monitoring, and disease management.
- **Types of Diagnostics** states the purpose for the different types of diagnostics including chemistry, immunochemistry, hematology, cytology, microbiology, infectious disease, imaging, and molecular testing.
- **The Science Behind Molecular Diagnostics** links DNA mutations and disease to the development and workings of companion diagnostics.
- **Selecting a Treatment** illustrates how companion diagnostics inform physicians on the best class of treatment for patients, including medication and dosage choice. This medication specificity is called personalized medicine.

