

Prescription for Perfection: The Science Behind a Great Rx

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1 hour

Course Description:

This lecture-style course provides a clear and engaging explanation of sphere, cylinder, axis, prism, and add power—core elements of an eyeglass prescription. Participants will learn how small errors in prescriptions can create big patient complaints, with real-world examples to build troubleshooting confidence. The course emphasizes practical knowledge for understanding prescriptions and managing patient expectations in optical settings.

Learning Objectives:

- Understand key components of an eyeglass prescription
- Learn how small errors impact vision
- Gain practical tips for troubleshooting patient complaints

15 minutes | Sphere Power: The Foundation of Vision Correction

- Define sphere power (myopia, hyperopia, emmetropia)
- Real-world examples of sphere prescriptions (e.g., -3.00D vs. +2.00D)
- How small sphere changes (e.g., 0.25D) can cause big complaints in high prescriptions
- Tips for managing patient expectations with high sphere powers

10 minutes | Cylinder & Axis: The Astigmatism Factor

- Define cylinder power and axis
- Explain how cylinder and axis correct asymmetrical vision
- Why axis precision is critical: *“What happens if you transpose a 90° axis error?”*
- Common troubleshooting examples:

- “I see halos around lights”
 - “My glasses feel off when I turn my head”
 - Case Study: Patient with -2.00 cyl at 180 vs. 090
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10 minutes | Prism: The Hidden Power in a Prescription

- What is prism, and why is it prescribed?
 - Overview of how prism corrects **binocular vision disorders** (e.g., vertical, horizontal deviations)
 - How small amounts of prism (e.g., 0.50D) can cause major discomfort
 - Signs a patient may need prism (or be misaligned)
 - Real-life “prism problems” and how to spot them in the optical
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10 minutes | Add Power: The Presbyopia Puzzle

- Define add power and its purpose for **presbyopic correction**
 - Typical add ranges and age correlation
 - The impact of small add power errors (e.g., 0.25D too high or low)
 - Managing patient adaptation to progressives
 - Troubleshooting common complaints:
 - “I can’t see the computer”
 - “The reading zone feels too small”
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10 minutes | Troubleshooting Tips: When Patients Say, “I Can’t See!”

- Review common prescription error scenarios:
 - Wrong sign on sphere
 - Axis transposition errors
 - Prism omitted or misapplied

- Inaccurate add power
 - Strategies for identifying and resolving issues:
 - Asking the right questions
 - Checking the lensometry
 - Communicating with the prescribing doctor
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5 minutes | Wrap-Up & Q&A

- Final tips for prescription confidence in optical