Closing the Oncology Education Gap: Design and Implementation of NCODA's Oncology Fundamentals and Business of Oncology Courses

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Background

- Oncology is rapidly evolving, with more than 4,700 Board Certified Oncology Pharmacists reported in 2025, yet student exposure to oncology remains variable.[1–3]
- Oncology practice is increasingly multidisciplinary and operationally complex, with variation in staffing, services, workflows, and performance metrics across institutions.[4–6]
- Expanding oral therapies, payer and reimbursement requirements, and medication distribution pathways highlight the need for both clinical and operational knowledge to support patient access and coordinated care.

Oncology Fundamentals

Course Objectives

1. Summarize the etiology, pathogenesis, clinical manifestations, diagnostic evaluation, biomarker-based characterization, and evidence-based treatment approaches associated with cancer.
2. Describe the mechanisms of action, key clinical features, and adverse-effect profiles of oncology pharmacologic classes.
3. Identify supportive care needs, counseling considerations, and drug interactions associated with oncologic pharmacotherapy classes.
4. Describe common oncologic emergencies and their appropriate evidence-based management strategies.
5. Complete oncology pharmacy calculations using patient-specific clinical information and dose-rounding principles to support safe and accurate anticancer medication dosing.

Modules	Length
Introduction to Oncology Care	1 hour
Calculations, Laboratory Values, and Dose Rounding	1 hour
Biomarker Testing	1 hour
Chemotherapy	1 hour
Hormonal Therapy	1 hour
Immunotherapy	1 hour
Targeted Therapy	2 hours
Oncologic Emergencies	1 hour
Supportive Care Part 1	1 hour
Support Care Part 2	1 hour

As oncology continues to advance, Oncology Fundamentals and Business of Oncology provide learners new to oncology with a strong foundation while giving experienced healthcare professionals the opportunity to revisit core concepts and stay current with evolving clinical and operational aspects of oncology practice.

Target Audience

Students, fellows, residents, pharmacists, advanced practice providers (APPs), and other healthcare professionals seeking to build a stronger foundation in oncology care or strengthen how oncology services are managed.

Oncology Fundamentals

References / Abstract

Business of Oncology

Business of Oncology

Course Objectives

1. Differentiate oncology practice models and key stakeholders.
2. Summarize financial, operational, and policy factors that influence oncology practice.
3. Review Medicare, commercial insurance, and financial assistance considerations that affect patient access and practice sustainability.
4. Explain core pharmacy operations, including workforce development and inventory management.
5. Identify accreditation and regulatory requirements that support high-quality oncology practice.
6. Recognize emerging technologies, digital health tools, and drug development processes that shape the future of oncology care.

Modules	Length
Foundations of Oncology Practices	1 hour
Pricing and Reimbursements	1 hour
The Essentials of Medicare	1 hour
Patient Insurance and Financial Navigation	1 hour
Health Policy and Advocacy	1 hour
Workplace Management	1 hour
Inventory Management and Financial Reporting	1.5 hours
Regulatory Compliance and Accreditation	1 hour
Technology and Telehealth	0.5 hours
Clinical Trial Basics in Oncology Practice	1 hour