



Provincial Standardized Chemotherapy and Biotherapy Course Syllabus

COURSE SYLLABUS

2018

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Course Offering: de Souza Institute

Course Format: eLearning and Workshop

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Registration: Required

A. COURSE DESCRIPTION

This 35 hour course is designed to support nurses building their knowledge and skills in Chemotherapy and Biotherapy administration and care. The program reflects standards identified by a number of national and international bodies, including the Canadian Association of Nurses in Oncology, and meets Cancer Care Ontario standards for chemotherapy delivery. In particular, this course meets Cancer Care Ontario's Regional Models of Care for Systemic Treatment recommendations, which specify that Registered Nurses who administer parenteral chemotherapy are required to achieve certification in chemotherapy administration and to engage in annual continuing education (Vanderberg et al., 2007).

John Miller's (2008) *Holistic Curriculum* model provides the philosophical framework for the course, interweaving a whole person approach with best evidence and knowledge in safe, standardized chemotherapy and biotherapy administration and care. The course curriculum was developed with feedback and guidance from oncology nursing experts from across Ontario. Participants will receive a certificate upon successful course completion. Following course completion, a chemotherapy preceptorship is required in the participant's local organization, enabling competency development in that system.

The de Souza Standardized Chemotherapy and Biotherapy Course is one component of many in a comprehensive chemotherapy and biotherapy education program. The de Souza chemotherapy and biotherapy program goals are as follows:

- To provide nurses with comprehensive holistic standardized chemotherapy and biotherapy education
- To support patient safety efforts by integrating safety theory within all levels of the curriculum
- To support knowledge translation and application of evidence based practice in systemic therapy
- To integrate Cancer Care Ontario practice recommendations into a comprehensive curriculum

B. COURSE OBJECTIVES

By the end of this course, you will be able to:

1. Demonstrate a holistic, person-centered approach to chemotherapy and biotherapy nursing care.
2. Identify various treatment modalities used in cancer treatment, with emphasis on chemotherapy and biotherapy.
3. Describe the different phases of drug development and clinical trials and the oncology nurses' role in clinical trials.
4. Summarize the factors that influence a person's response to chemotherapy and biotherapy.
5. Identify commonly used chemotherapy and biotherapy agents, their mechanisms of action, administration recommendations, infusion related issues and side effects.
6. Review and analyze chemotherapy orders and calculations.

7. Discuss safe handling issues for chemotherapy and biotherapy, including safe administration practices, management of bodily wastes and spill management. Demonstrate principles of safe handling and spill management in selected cases.
8. Consider and apply safety issues and theoretical principles in common chemotherapy and biotherapy scenarios, which include: human factors theories, pump safety literature, cognitive checking principles and guidelines for independent double checks.
9. Identify nursing procedures and interventions for administration of cytotoxic and biologic agents by the following routes: PO, IM, SC, and IV. Greater time will be focused on oral and intravenous administration, the most common forms of administration.
10. Identify the immediate adverse events and long-term side effects of common chemotherapy and biotherapy agents and their appropriate management.
11. Discuss symptom management and related teaching points for patients and families, as guided by evidence based education principles.
12. Identify internal and external resources to support patients and families in your community.
13. Articulate the ethical and legal considerations frequently encountered in practice and apply a framework to resolve ethical dilemmas.
14. Demonstrate documentation that is consistent with the Cancer Care Ontario's recommendations for practice.

C. MODE OF LEARNING

The main mechanisms to facilitate learning in this course are eLearning and an in person workshop.

eLearning

eLearning, offered through the de Souza eLearning center, will include the following activities: a review and application of knowledge, self-directed readings, assignments, quiz activities and case studies. The eLearning environment fosters a self-directed approach for participants to progress through the modules at a convenient time, either at home or work. The course timetable, in Section H on pages 7-8 of the course syllabus, outlines weekly expectations for participants.

- Learning and application: Sections and modules are developed by the de Souza education team to reflect the latest knowledge in chemotherapy and biotherapy administration and care. The content is up to date and the learning format is interactive. Learning activities include online modules, quizzes, and case studies.
- Readings are intended to enhance the eLearning content surrounding key topic areas. Required readings further explain important concepts and are marked as required. All other readings are optional and intended to enhance the participants understanding of course content and to expand their learning.
- Assignments have been developed with the intent of engage participants in applying essential competencies related to cancer chemotherapy care and assessment to practice issues. There are two mandatory assignments to complete which will be marked by the facilitator and feedback will be provided.
- Technical support will be provided throughout the course.

Workshop:

This course includes a full day (7.5 hour) workshop, during which nurses will have the opportunity to work through the following: problem-based case studies, side effect assessments; practice handling a chemo spill, IV administration practice and review conducting an IV assessment.

The workshop will occur between week 5 and 7 of the course, from 8:30am to 4:30pm. The workshop details will be posted on the de Souza Website in the course calendar. The workshop site of attendance is selected during registration to the course.

D. MODES OF EVALUATION

As part of the evaluation process, you are required to complete the following:

- A baseline evaluation: this survey assesses your knowledge, attitude, confidence, before you begin the eLearning modules for the course.
- Pre-Knowledge Test: Assess your knowledge of chemotherapy and biotherapy prior to taking the course.
- Foundations Modules and Quiz: You will be required to pass a Foundation's Quiz in Section 3, with a mark of 70% or greater. Individuals that have not completed the de Souza Foundations in Oncology Nursing Course, or who are new to oncology practice, are strongly advised to review the four Foundations Modules that correspond to the quiz. Access to sections 4 to 17 will not be available until this quiz is passed.
- eLearning sections/ modules, required readings and discussion forum:
 - You are required to complete all eLearning module content in each section and complete all quizzes that correspond with the module content.
 - Two online assignments must be completed by the due date. Please view the grading rubric in Appendix A for details on how the assignments will be marked.
 - A comprehensive case study must be completed, as a review activity, after completing course module activities.
 - You must receive a pass mark of 70% or greater on all course content before the course exam becomes available to you.
- Workshop: you are required to attend and actively participate at the in-person workshop. Attendance will be taken at the workshop and recorded in the eLearning course. A workshop evaluation must also be completed.
- Exam: Participants must write the final exam by the course end date. There are 44 multiple choice questions in the exam. Participants will be given 1.5 hours to write it. To successfully pass the exam, participants must obtain a minimum of 36 of out 44 (>80%). The exam is open book. No talking is permitted during the exam. The invigilator must be present for the full 90 minutes.
 - We recommend that you attempt the exam at least 1 week before the course ends.

You are allowed a maximum of two attempts for this exam. If you are not successful after two attempts, we recommend that you retake this course at a later time.

- Post evaluation: At the end of the course, participants will be required to complete the online post course evaluation through eLearning and a workshop evaluation.

It is your responsibility to ensure that you have completed all course requirements.

When you have met the all the above requirements, you will receive a downloadable certificate of completion via your My Account and will receive a credit towards de Souza designation. Please note: the certificate of completion will be available two weeks after the closing of the online course.

E. COMPETENCIES

A number of competencies will be evident within each module and encompass the Canadian Association of Nurses in Oncology and the College of Nurses of Ontario Standards of Practice.

College of Nurses of Ontario Standards

- Accountability
- Continuing competence
- Knowledge
- Knowledge application
- Leadership
- Relationships
- Professional relationships

Standards & guidelines link:

<http://www.cno.org/en/learn-about-standards-guidelines/standards-and-guidelines/>

Canadian Association of Nurses in Oncology: Competencies associated with cancer chemotherapy nursing practice:

- Comprehensive health assessment
- Supportive and therapeutic relationships
- Management of cancer symptoms and treatment side effects
- Teaching and coaching
- Facilitating continuity of care/ navigating the system
- Decision-making and advocacy
- Professional practice and leadership

CANO Standard Link:

<http://www.cano-acio.ca/conep/>

CANO National Strategy for Chemotherapy Standards Link:

http://www.cano-acio.ca/national_chemotherapy_administration_standards

F. TIME REQUIREMENT AND EXPECTATIONS FOR PARTICIPANTS

To be successful in completing this course, you are encouraged to set aside 3 to 5 hours each week to complete each section as learning is primarily self-directed. The total learning hours for this course is 35 hours. Although participants receive 35 learning hours upon successful completion of the course, depending on the level of experience, some participants may need to spend more than 35 hours whereas others may require less than 35 hours to complete the course.

A midterm week is provided in Week 4 of the course. No assignments or modules are due at this time. During the midterm week you have the opportunity to catch up on reading any modules that you did not complete during the previous week.

Sections and modules are to be completed sequentially; participants can choose to go ahead and complete learning activities in multiple sections and modules at once but must submit the assignments in the assigned weeks. (Refer to timeline- page 6 - 8).

Your course activity completion will be reflected in your grade book. Evidence of engagement through active participation will result in a positive learning experience. You will be expected to complete all 17 sections/ modules through the eLearning system.

Workshop: For the workshop, participants are expected to complete all course sections, bring completed pre-workshop homework, and actively participate in all workshop activities.

Study Guides: Study guides have been developed that correspond with each module in the course. The printable study guides are designed to help you identify, organize and remember key information in the course. The guides will help you recognize related concepts and make meaningful connections between topics, thus helping you to acquire a higher level of understanding. The guides can be a resource to support you in the online open-book exam.

There are study guides for each module in each section of the course. You are not required to complete each study guide, but are encouraged to do so where you feel they will be helpful.

Review Section: Case studies are provided at the end of the course to facilitate your application of essential concepts in the course to practice scenarios that are relevant to your clinical area. There are two case scenarios to select from: Bob Pennington (Solid Tumour Case) and Anders vander Schaaf (Malignant Hematological Case). It is mandatory to complete one case, but both can be completed to facilitate learning.

G. FACILITATOR AVAILABILITY

As the facilitators for this course, we will be responsible to answer questions related to course content, to monitor the registration process, to facilitate the eLearning modules, and be available to you for questions throughout the course. You can expect us to respond to your queries within 24-hour time period during the week and 48 hours on the weekend. Technical support is available by contacting support@desouzainstitute.com

H. COURSE TIMELINE

The following sections/modules are to be completed in sequential order according to numerical identifier. Please note that the timeline below is a guide. It is the participant's responsibility to ensure that all course requirements are completed by course end date.

Section	Topic	Post Date	Date to Complete
Introduction	eLearning Center Orientation <i>(Optional- but highly recommended)</i>	Within first week of the course	Completion by the end of 1 st week
1	Resources to be Used Throughout the course		Review during the first week of the course and use resources throughout the course
2	Cancer Care System and Person Centred Approach	Within first week of the course	Completion by the end of 1 st week
3	Foundations Introductory Units to Cancer <ul style="list-style-type: none"> Only required to pass quiz with grade of 70% or higher. 	Within first week of the course	Completion by the end of 1 st week
4	Diagnosis, Staging and Treatment	Within first week of the course	Completion by the end of 1 st week
5	Clinical Trials	Within second week of the course	Completion by the end of 2nd week
6	Patient Education	Within second week of the course	Completion by the end of 2nd week
7	Safe Handling <ul style="list-style-type: none"> Mandatory Assignment to be completed by end of 3rd week (must obtain 9/12 to pass) 	Within second week of the course	Completion by the end of 2nd week
8	Safety Theory	Within second week of the course	Completion by the end of 2nd week
9	Assessment	Within third week of the course	Completion by the end of 3rd week
10	Administration	Within third week of the course	Completion by the end of 3rd week
11	Cancer and Aging	Within third week of the course	Completion by the end of 3rd week
12	Chemotherapeutic Agents	Within third week of the course	Completion by the end of 3rd week

Section	Topic	Post Date	Date to Complete
Midterm Week- Week 4			
13	Biotherapy	Within fifth week of the course	Completion by the end of 5th week
14	Oral Systemic Therapies	Within fifth week of the course	Completion by the end of 5th week
15	Adverse Effects • Mandatory Assignment to be completed by end of 6th week (must obtain 9/12 to pass)	Within fifth week of the course	Completion by the end of 5 th week
16	Immediate Complications	Within sixth week of the course	Completion by the end of 6 th week
17	Ethical and Legal Concerns in Oncology Nursing Practice	Within sixth week of the course	Completion by the end of 6 th week
Case Study for Review	Complete one case study as review prep for the exam	After completing all course modules	Before writing the exam; by 10 th week of the course
Workshop	In-person (local cancer centre)	N/A- See News Forum for workshop information	Occurs between week 5 and 7 with full participation required
Exam	Covers all topic areas	Complete after the workshop	By the course end date. We recommend that you write the exam one week before the end date just in case you need to re-write the exam. No re-writes will be permitted after the course end date.
Final evaluation	Online	Post workshop to course closing date	By the course end date.

I. FACILITATOR'S BIOGRAPHY

Donalda MacDonald has been an oncology nurse for 40 years working in both inpatient and outpatient units. For 25 years she has been a primary nurse in lung and GI oncology as well as working in the chemotherapy suite. For the last 10 years of her clinical career, she has been the solo instructor for the Sinai C.A.R.E. Cancer Care education series that she and her chemo colleagues developed targeting nurses new to oncology. Donalda has served on the board of directors for the Canadian Association of Nurses in Oncology for 7 years, 5 of which she was the treasurer. She has done item writing and exam review for the CNA Oncology Certification Exam and continues to be a mentor for nurses preparing for the exam. In 2008, Donalda was nominated by her oncology peers and was one of 100 nurses from across Canada to receive the CNA Centennial Award honoring her work in education of novice oncology nurses.

Komal Patel began her nursing career at William Osler Health System in Brampton, Ontario in 2006 on an in-patient oncology unit. Komal joined de Souza Institute in 2012. Komal values lifelong learning and has demonstrated this in many local, provincial and national professional activities. In 2011, Komal completed an RNAO clinical fellowship that focused on Oncology and Palliative Pain and Symptom Management. Komal holds a BScN from the University of Windsor and holds a Masters in Nursing with a teaching focus from Athabasca University. She obtained her Oncology CNA certification in 2010, Hospice Palliative Care certification in 2012 and CVAA certification in 2014. Komal obtain her de Souza APN designation in 2014. Komal is currently enrolled in a Post Master's Nurse Practitioner Program that focuses in Primary Care.

Additional Information Regarding Learning At de Souza Institute

A. SOCIAL FORUM

The social forum is provided for you, the participants, to post news, items of general interest, share information about yourselves and to raise topics of interest beyond the specific questions being discussed in the module-specific forums. All messages of a social nature can be posted in the social forum. This forum is open to all participants, including the facilitator.

B. VIRTUAL LIBRARY

The de Souza Institute has a virtual library that can be accessed to those registered in this course or any other de Souza Institute continuing education program. This resource enables you to access over 1500 e-Journals, 200 e-books and 8 on-line databases such as CINHALL or Ovid-Medline. You can use the virtual library to access the required reading materials for your course. The virtual library can be accessed 24 hours a day at any location that has internet access using a login and password.

C. TECHNICAL SUPPORT

eLearning Centre Orientation

If this is the first time you are taking a course offered by the de Souza Institute, please complete the eLearning Centre Orientation course (free of charge). This course is designed to introduce you to online learning and help you understand how to navigate through the de Souza Institute eLearning centre and courses. It is strongly recommended that you complete this orientation so you will be able to successfully navigate de Souza's eLearning environment.

de Souza Support

If you have questions about the content of a course please email your course facilitator.

If you need assistance accessing or navigating the eLearning Centre, please refer to the eLearning Orientation course. If you have questions or have any general technical difficulties please contact support@desouzainstitute.com.

D. POLICIES AND PROCEDURES

Click the links below to read de Souza Institute's Academic Honesty and Copyright; and cancellation, incomplete and no show policies.

[Academic Honesty and Copyright Policy](#)

[Cancellations, Incomplete and No Show Policy](#)

A 50% refund will be provided to participants who drop the course within its first week (5 business days) of running. Individuals who drop the course after the 1st week will not receive a refund and will receive a failing mark in My Account.

Course content and resources provided in this course are based on best practice guidelines from provincial and national bodies. Please consult your facilitator if you have specific questions related to local protocols and policies as they vary among healthcare organizations.

Appendix A: Assignment Grading Rubric

Grading Criteria				
	0	1	2	3
Able to identify key concepts	Assignment late or not posted or No evidence that essential cancer chemotherapy concepts are identified in the assignment	Incomplete assignment that offers limited understanding of core concepts relevant to cancer chemotherapy care in the case study	Provides a complete assignment containing a clear understanding of all core cancer chemotherapy concepts relevant in the case study	Provides additional evidence, resources or information related to key concept(s) from the assignment to enhance the learning experience
Demonstrates comprehension of concepts in various contexts	No evidence to infer relationship between theory and practice	Provides example(s) of application in practice of concepts relevant to the assignment with limited application of patient-centred approach (where applicable)	Provides example(s) of application in practice of concepts relevant to the assignment and considers a wholistic patient-centred approach (where applicable)	Provides example(s) of application in practice of concepts relevant to the assignment and describes a wholistic patient-centred approach including analysis (where applicable)
Knowledge integration through critical thinking and/or reflection	No evidence of critical thinking and/or reflective thought pertaining to the assignment, personal perspectives on critical issues and professional development	Little evidence of critical thinking/reflective thought pertaining to the assignment, personal perspectives on critical issues and professional development	Evidence of some reflective thought pertaining to the assignment, personal perspectives on critical issues and professional development	Evidence of strong reflective thought pertaining to the assignment, personal perspectives on critical issues and professional development
Integration of a collaborative approach in addressing key issues in the assignment case	No mention of collaborative care	Assignment brief or vague in description of working with patients and other professionals collaboratively (where applicable)	Assignment articulates a detailed example of how patients, families and other providers are involved collaboratively in care delivery (where applicable)	Assignment articulates process and results of team based care, i.e., working together, sharing a common goal, leveraging resources, and providing right service in the right place (where applicable)

A grade of 9 or higher (75%) is considered satisfactory.