Justice Institute of British Columbia

COURSE OUTLINE

Course Code: HLTH-1410

Course Title: Intravenous (IV) Therapy and Protocol Update

Prerequisite Courses: Completion of the Primary Care Paramedic program (or equivalent)

School: School of Health, Community and Social Justice

**Division/Academy/Centre: Health Sciences Division**

**Previous Course Code & Title: CPD 126 Paramedic Intravenous Therapy and Protocol Update**

Course First Offered: 2004

|  |  |
| --- | --- |
| **# of Credits:** | **2** |

**Course Description**:

Intravenous (IV) therapy is an important aspect of patient management in the hospital and pre-hospital settings. The advantages of IV therapy are the control and the speed with which fluids and medications may be administered. However, IV therapy has potential hazards and complications. This course will provide learners with theoretical concepts related to fluid and electrolyte physiology, pharmacology and intravenous therapy. It will provide learners with the skills and knowledge to initiate, maintain, and evaluate intravenous therapy. Proficiency is developed during a clinical practicum.

**Course Goal(s):**

The goal of this course is to provide learners with the skills, knowledge and judgment to initiate, maintain, and assess intravenous therapy using Primary Care Paramedic (PCP) assessment skills, treatments and protocols.

**Learning Outcomes:**

Upon successful completion of this course, the learner will be able to:

* Demonstrate proper safety measures for conducting peripheral venipuncture and cannulation
* Demonstrate proper techniques when conducting peripheral venipuncture and cannulation
* Apply principles of drug calculation and indications and contraindications of IV medications to the safe administration of IV therapy drugs
* Apply principles of managing complications of IV therapy
* Apply principles to the maintenance and discontinuation of IV therapy

**Course Topics/Content:**

* Introduction to IV Therapy
* Fluids and Electrolytes
* Pharmacology and IV Therapy
* Procedures and Procedure Preparation
* IV Therapy Procedures
* IV Maintenance

**Text and Resource Materials:**

**Required:** Health Science Division (2015). *Intravenous Therapy Study Guide.* JIBC: New Westminster, BC.

**Recommended:**

**Course Level:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | First Year |  | Second Year |  | Third Year |  | Fourth Year |
|  | Graduate | X | Other (describe): Continuing Education | | | | |

Equivalent Course(s) within the JIBC:

Class Delivery Methods:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Delivery Methods** | Class Option A (Hours) | Class Option B  (Hours) | Class Option C (Hours) | Class Option D (Hours) |
| Classroom/Lecture/Discussion | 8 |  |  |  |
| Simulation/Lab | 16 | 8 |  |  |
| Praxis Exercise |  |  |  |  |
| Practicum/Fieldwork | 8 | 8 |  |  |
| Online |  | 16 |  |  |
| Correspondence |  |  |  |  |
| Total Class Hours | 32 | 32 |  |  |

Comments on Delivery Methods:

* In addition to the online readings, protocol review, learners are required to participate in online group discussion and case studies (applicable to Option B Delivery Method)
* Leaners will be required to complete the didactic component (face-to-face) prior to attending the practice education portion of the course.

**Course Grading System:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Letter Grades |  | Percentage | X | Pass/Fail |
|  | Complete/Incomplete |  | Attendance Only |

|  |  |
| --- | --- |
| **Passing Grade:** | PASS |

**Evaluation Activities and Weighting:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Final Exam | 80% | Assignments | % | Project | % | Capstone Project | % |
| Midterm Exam | % | Portfolio | % | Participation | 10% | Other | % |
| Quizzes/Test | 10% | Simulations | % | Practicum | % | TOTAL | 100% |

**Comments on Evaluation Activities and Weighting:**

* Learners are required to participate in online discussion (applicable to Option B Delivery Method)
* Learners are required to participate in and complete IV skills station simulations in a face-to-face setting, achieve a minimum grade of 75% on the final written quiz and “mastered” on the skills demonstration component.
* In addition to these evaluation activities students are required to complete a minimum of one day (8 hours) of supervised practice education to master this important skill. Learners must competently perform and document a minimum of 10 live IV starts. Emergency Medical Assistant Licensing Branch (EMALB) in BC requires a minimum 10 live starts for PCP IV Endorsement.
* Leaners will be required to complete the didactic component (online and face-to-face) prior to attending the practice education portion of the course.

Retests:

Learners who receive a grade below 75% on the written quiz will be provided with the opportunity to complete one retest of the written quiz. If a learner does not achieve a grade of 75% or higher on the retest he/she will be considered to be unsuccessful in the course and be required to repeat the course.  A learner who does not receive a notation of ‘mastered’ on the skills demonstration component will be provided with one retest opportunity.   If he/she is unsuccessful at the skill demonstration retest, and has successfully passed the written evaluation the learner is considered to be unsuccessful in the course and is required to repeat the full course.  A learner who is unsuccessful at both the skill demonstration and the final quiz will be required to repeat the course.

**Other Course Guidelines, Procedures and Comments:**

View official versions of related JIBC academic regulations and student policies in the *JIBC Calendar* on the following pages of the JIBC website:

|  |  |
| --- | --- |
| **Academic Regulations:** [*http://www.jibc.ca/programs-courses/jibc-calendar/****academic-regulations***](http://www.jibc.ca/programs-courses/jibc-calendar/academic-regulations) | **Student Policies:**  [**http://www.jibc.ca/about-jibc/governance/policies**](http://www.jibc.ca/about-jibc/governance/policies) |
| Student Academic Integrity Policy  Academic Progression Policy  Admissions Policy  Academic Appeals Policy  Evaluation Policy  Grading Policy | Access Policy  Harassment Policy – Students  Student Records Policy  Student Code of Conduct Policy |

**JIBC Core Competencies**

The JIBC promotes the development of core and specialized competencies in its programs. Graduates of our programs will demonstrate high levels of competence in the following areas:

|  |  |
| --- | --- |
| **Critical thinking** Identify and examine issues and ideas; analyze and evaluate options in a variety of fields with differing assumptions, contents and methods. | **Problem solving** State problems clearly; effectively and efficiently evaluate alternative solutions; choose solutions that maximize positive and minimize negative outcomes. |
| **Communication, oral and written** Demonstrate effective communication skills by selecting the appropriate style, language and form of communication suitable for different audiences and mediums. | **Interpersonal relations**  Know and manage ourselves; recognize and acknowledge the needs and emotions of others including those with diverse cultures, backgrounds and capabilities. |
| **Leadership** Inspire individuals and teams to reach their potential by embracing innovation through strategic thinking and shared responsibility. | **Inter-professional teamwork** Understand and work productively within and between groups, respect others’ perspectives and provide constructive feedback with special attention to inter-professional relationships. |
| **Independent learning** Show initiative by acting independently in choosing effective, efficient and appropriate applied learning, research and problem solving strategies.  **Globally-Minded**  Self-aware of own identity and culture, recognize the interconnectedness of world events and issues; interact respectfully and authentically across cultures; value multiple perspectives; utilize curiosity to learn with and from others. | **Information literacy** Recognize and analyze the extent and nature of an information need; efficiently locate and retrieve information; evaluate it and its sources critically, and use information effectively and ethically. |