Definition of the domain for summative evaluation

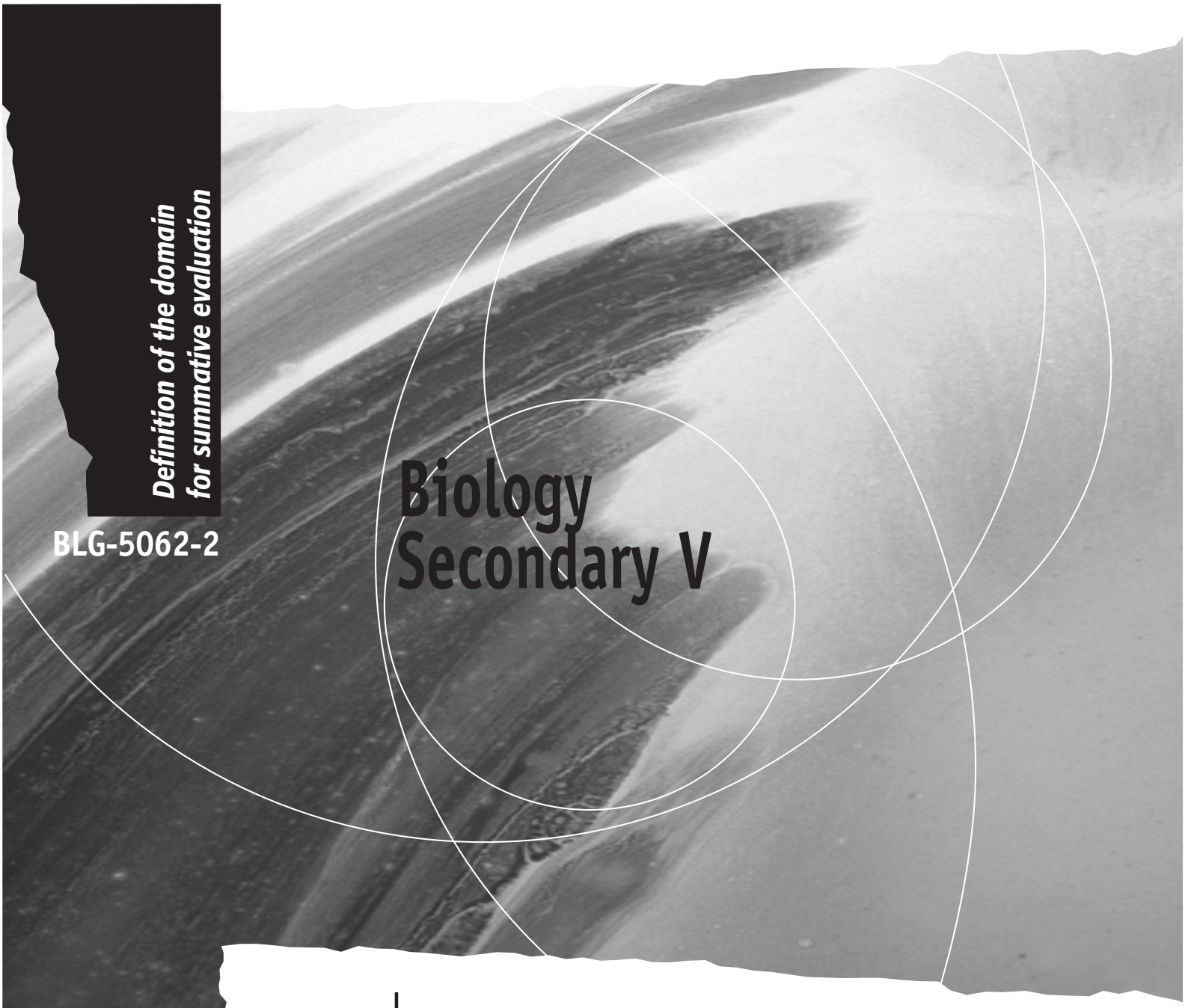
BLG-5062-2

Biology Secondary V

The Human Reproductive System and the Perinatal Period

Reach for your Dreams

Québec



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Biology Secondary V

The Human Reproductive System and the Perinatal Period

Formation professionnelle et technique
et formation continue

Direction de la formation générale
des adultes

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1. Introduction

This definition of the domain for summative evaluation describes and classifies the essential and representative elements of the *Biology* program—specifically, for the course *The Human Reproductive System and the Perinatal Period*. It presents an overview of the program, but should by no means replace the program itself. The purpose of defining the domain is to ensure that all the instruments for summative evaluation are consistent with the overall program.

This definition of the domain is organized in the same way as it is in other courses. The content of each section is, however, specific to this course.

The definition of the domain for summative evaluation is used to prepare examinations that are valid from one version to another, from year to year, and from one school board to another, taking into account the responsibilities shared by the Ministère de l'Éducation and the school boards.

2. Program Orientations and Consequences for Summative Evaluation

Orientations	Consequences
The purpose of this program is to help students acquire knowledge of human anatomy and physiology.	Evaluation will test the students' knowledge of anatomical and physiological concepts of the human reproductive system and the perinatal period.
The purpose of this program is to help students understand how the human body functions.	Evaluation will test the students' understanding of the perinatal period and how the human reproductive system functions.
The purpose of this program is to help students understand the causes and effects of the principal health disorders associated with the human body and the factors that contribute to its health.	Evaluation will test the students' ability to establish relationships between acquired anatomical and physiological concepts and the principal health problems associated with the human reproductive system.

3. Course Content for Purposes of Summative Evaluation

Themes

- **Anatomy of the Reproductive System**

  – Description of the male reproductive system:
    - name of anatomical structures
    - description of anatomical structures
    - role of anatomical structures
    - diagram

  – Description of the female reproductive system:
    - name of anatomical structures
    - description of anatomical structures
    - role of anatomical structures
    - diagram

  – Diagram of a spermatozoon and an ovum

- **Physiology of the Reproductive System**

  – Puberty in adolescent boys and girls:
    - hormone regulation
    - physical and physiological changes

  – Spermatogenesis and oogenesis

  – Cycle and role of hormones related to the menstrual cycle

  – Menstrual cycle and relationships between the hormonal cycle, the ovarian cycle and the uterine cycle

  – Physiological aspects of sexual relations

  – Path of gametes, fertilization, formation and development of an embryo and a fetus

  – Childbirth:
    - early signs of labour
    - stages of labour
    - medical interventions

– Breast or bottle feeding:
  - natural
  - bottle
  - both

– Pregnancy termination techniques

- **Reproductive Health and Hygiene**

  – Menstrual disorders and menopause

  – Methods of contraception and sterilization:
    - mode of action
    - efficacy rate
    - advantages and disadvantages

  – Sexually transmitted diseases:
    - characteristics
    - symptoms
    - risk factors and transmission
    - consequences of non-treatment

Skills

- **Describing:** Observing, identifying or recalling the characteristics of a phenomenon or the components of a system.

- **Explaining:** Showing in a structured way the nature and interaction of complex relationships between objects or phenomena.

4. Table of Dimensions

Themes / Skills	Anatomy of the Reproductive System 25%	Physiology of the Reproductive System 50%	Reproductive Health and Hygiene 25%
Describing 60%	Description of male reproductive system (10%) Description of female reproductive system (10%) Diagram of spermatozoon and ovum (5%) **(1) 25%**	Physiological aspects of sexual relations (5%) Pregnancy termination techniques (5%) **(2) 10%**	Menstrual disorders and menopause (5%) Methods of contraception and sterilization (10%) Sexually transmitted diseases (10%) **(4) 25%**
Explaining 40%		Puberty in adolescent boys and girls (5%) Spermatogenesis and oogenesis (5%) Cycle and role of hormones related to the menstrual cycle (5%) Menstrual cycle and relationship between hormonal, ovarian and uterine cycles (10%) Path of gametes, fertilization, formation and development of embryo and fetus (5%) Childbirth (5%) Breast or bottle feeding (5%) **(3) 40%**	

5. Observable Behaviours

Dimension 1

– Name the structures indicated on a diagram of the male reproductive system and associate each of these structures with roles and descriptive elements appearing on a list. (The list should contain more roles and descriptive elements than are required.) (10%)

– Name the structures indicated on a diagram of the female reproductive system and associate each of these structures with roles and descriptive elements appearing on a list. (The list should contain more roles and descriptive elements than are required.) (10%)

– Name the structures indicated on a diagram of a spermatozoon or an ovum and specify the role of each one. (5%)

Dimension 2

– Given a series of statements, choose those that correctly describe the physiological aspects of sexual relations in men or women. Correct false statements to make them valid. (5%)

– Given a series of statements, choose those that correctly describe the different techniques used to terminate pregnancy based on the stage of the pregnancy. Correct false statements to make them valid. (5%)

Dimension 3

– Given a series of statements, choose those that correctly explain the onset of puberty in adolescent boys and girls. Correct false statements to make them valid. (5%)

– Arrange in the correct sequence true statements concerning spermatogenesis or oogenesis, and identify those statements that characterize a given stage in the process. (5%)

– Given a series of statements, choose those that correctly explain the cycle and the role of hormones related to the menstrual cycle. Correct false statements to make them valid. (5%)

– Given true statements and diagrams related to events in the menstrual cycle (e.g. ovarian and uterine cycles, variations in hormone levels, and period of fertility), reconstruct how the cycle unfolds and highlight events that occur simultaneously. (10%)

– Given true statements on the path travelled by gametes before fertilization, and on the fertilization, formation and development of an embryo and a fetus, reconstruct the sequence of events. (5%)

– Given a series of statements, choose those that correctly explain the early signs and the various stages of labour, and the medical interventions possible during childbirth. Correct false statements to make them valid. (5%)

– Given a concrete situation involving a choice of breast feeding, bottle feeding or both, state and justify the advantages and disadvantages of the possible choices. (5%)

Dimension 4

– Given a series of statements, choose those that correctly describe menstrual disorders or that adequately link menopause to menstrual interruption. Correct false statements to make them valid. (5%)

– Given a list of three methods of preventing pregnancy, specify the mode of action, the efficacy rate, one advantage and one disadvantage of each method. Specify also whether the method is one of contraception or sterilization. (10%)

– Given a list of characteristics or symptoms of sexually transmitted diseases, name the diseases, and specify the risk factors, the transmission modes, and the consequences of non-treatment. (10%)

6. Explanation of Content and Weighting

In establishing the relative importance of the themes *Anatomy*, *Physiology* and *Health and Hygiene*, greater weight has been assigned to understanding how the reproductive and perinatal system functions and the factors that help maintain its health, than to memorizing anatomical structures.

The relative importance of each skill to be developed was determined by adding up the weightings given to the observable behaviours pertaining to that skill.

On the basis of the tasks prescribed by the terminal objectives of the program, the weighting of the themes and skills has been established as follows:

Dimensions related to the theme *Anatomy*	25%
Dimensions related to the theme *Physiology*	50%
Dimensions related to the theme *Health and Hygiene*	25%
Dimensions related to the skill *Describing*	60%
Dimensions related to the skill *Explaining*	40%

7. Description of the Examination

A. Type of Examination

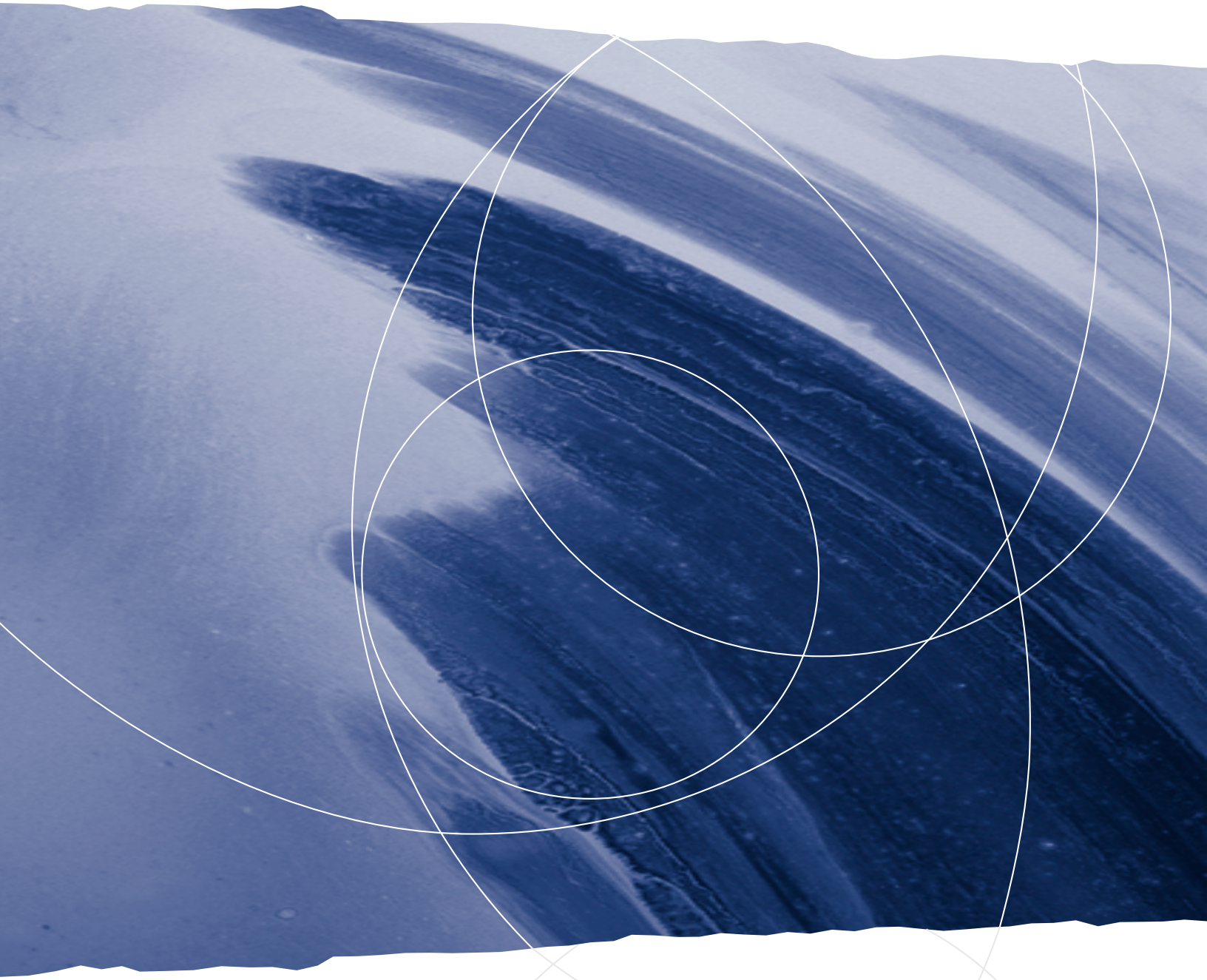
The summative examination is a written examination administered at the end of the course. It is designed to measure all of the dimensions and counts for 100% of the final mark. It consists of structured-response and short-response items.

B. Characteristics of the Examination

The examination is written at the end of the course in a single session lasting no more than 120 minutes.

C. Pass Mark

The pass mark for the entire examination is 60%.



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