Doctor of Pharmacy (Pharm.D.) Program Description

Faculté de pharmacie Université Laval







### Presentation Plan

- Program Overview
- Structure of the Program
- The Learning Continuum
- Professional Experiential Learning
- Assessment Process
- Ressources





### Overview

...to meet current and future needs in the practice of pharmacy in the province of Quebec:

- An entry-level Doctor of Pharmacy program
- A professionalization approach
- A set of 5 professional competencies
- An expected grade outcome
- 14 professional qualities
- A competency developping plan (progress map)



## A professionalization approach

... enables students to acquire the models, blueprints, capacities, abilities and qualities necessary to address the issues, challenges, related problems and wide range of situations that constitute the practice of pharmacy both now and in the future.

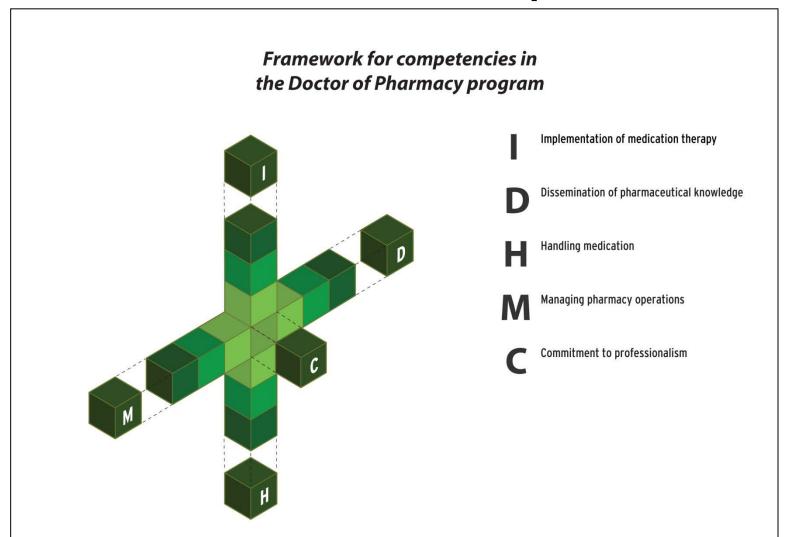


## The definition of competence

... A complexity of knowing-and-acting based on the mobilization, combination and efficient use of a variety of internal and external resources within a family of situations.

Jacques Tardif (2005)

## The definition of competence





## 5 professional competencies

- 1) Implementation of medication therapy
- 2) Dissemination of pharmaceutical knowledge
- 3) Handling medication
- 4) Managing pharmacy operations
- 5) Commitment to professionalism

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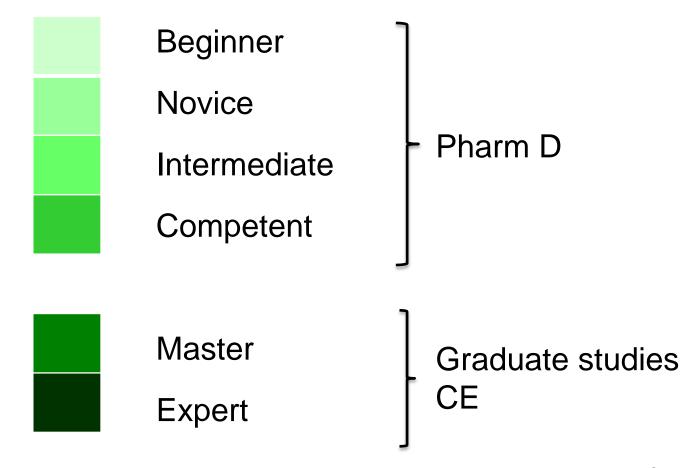
## 14 qualities (« postures »)

Empathetic towards clients	Law-abiding
Inquisitive	Analytical in the approach to issues
Continually adding to and updating their knowledge	Equanimity
Attentive to professional image	Contributor to other professionals and colleagues
Careful with resources	Dedicated agent of change
Scrupulous regarding professional secrecy	Assumes responsibility for the optimal use of medication
Critically appraises information to be explained or conveyed	Reflective on and in action



## The progress map for learning

A scale developped and based on a 4 stage pathway:



# Progress map for learning in the Doctor of pharmacy (PharmD)

	Implementation of medication therapy	<b>D</b> Dissemination of pharmaceutical knowledge	C Commitment to Professionalism		
<b>Year 1</b> Beginner stage	Therapy: 1 medication, 1 illness Monitoring: basic means Interveners: pharmacist- customer-physician Relationship based on trust: pharmacist-customer	Way of conveying information: pharmacist- initiated advice Relationship: pharmacist- customer Information: basic	Obligations concerning implementation and delivery of medications ready to administer, compounding and reconstituting drugs	Direct management	Professional image within the context of commitment  Regulation: recognition of their limits  The impact of their actions
<b>Year 2</b> Novice stage	Therapy: medications, 1 illness  Monitoring: all the means	Way of conveying information: opinion Requested by: customer or physician Contractual-Consensual Relationship: pharmacist-customer; pharmacist-physician-customer	Obligations concerning internal issues (storage, conservation, destruction)	Managing internal operations of a pharmacy (delegation, management of the staff, the equipment, the information)	Civil and legal liability Regulation of their intra-professional collabora- tion
<b>Year 3</b> ntermediate stage	Therapy: several medications, one illness or concomitant illnesses Interveners: customer-pharmacist-physicians and other professionals  Constructive relationship: pharmacist-customer-health care professionals	Way of conveying information: training and education Relationship: pharmacist- targeted groups Information: various sources	Obligations concerning external issues (selection, supply) Compounding and dispensing of sterile products	Managing external operations of a pharmacy (suppliers, competitors, services)	Social responsibility Regulation of their inter-professional collabora- tion
<b>Year 4</b> Skilled stage	Therapy: complicated pharmaceutical profile (many medications, many illnesses) Equate: needs/ health status of the client	Way of conveying information: instruction Relationship: pharmacist-peers and other healthcare professionals Information: scientific literature	Obligations concerning social issues	Managing a pharmacy with an eye to efficiency and optimal quality	Moral responsibility Personal vision as part of professional commitment



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## Structure of the program

- The stages (years)
- The instructional units (15 throughout the program)
- The courses
- Professional Experiential Learning modules
- Pathway options

#### STRUCTURATION DU PROGRAMME DU CHEMINEMENT RÉGULIER : ACTIVITÉS DE FORMATION ET MODULES D'APPRENTISSAGE EN MILIEU PROFESSIONNEL (AMP) DANS LE DOCTORAT EN PHARMACIE



#### Instructional Units vs. Competencies

Instructional units	I	D	Н	M	C
Year 1: Beginner stage Introduction to studies in pharmacy Preparation of non sterile products Structuring a consultation Limited professional services I Limited professional services II					
Year 2: Novice stage I intervene in a simple situation I I intervene in a simple situation II I intervene in a simple situation III					
Year 3: Intermediate stage  Expanded professional services I  Expanded professional services II  Dispenser of sterile products  Expanded professional services III					
Year 4: Competent stage I intervene in a complex situation, here or elsewhere I I intervene in a complex situation, here or elsewhere II I intervene in a complex situation, here or elsewhere III					

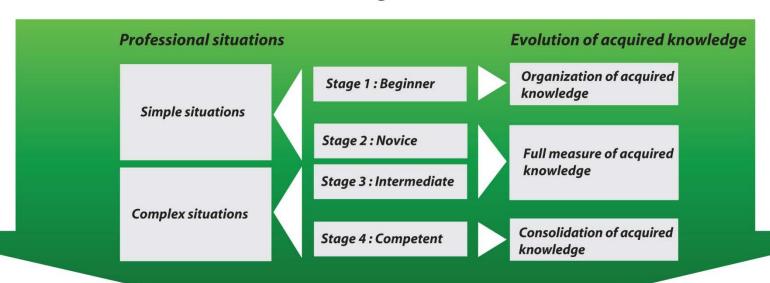
The dark grey box indicates that the competence is especially sought after, the pale grey that it is supplementary, and the white box indicates that the competence is not sought.

#### Referencing the Anatomical Therapeutic Chemical (ATC) Classification System

Stage 1	Stage 2	Stage 3
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	Stage 1	Stage 1 Stage 2

The black shading indicates that the drug classes are seen at that particular stage of the program

#### **Progression**



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## Pathway options

- Doctor of Pharmacy Program: 164 credits
  - □ 143 credits: common requirements
  - 21 credits: specific requirements
- Five different pathways:
  - Regular degree
  - Study abroad profile
  - Entrepreneurial profile
  - International healthcare specialty
  - Research in pharmaceutical sciences

# Specific requirements

	Languages	Openness to the world	PEL - Module 13 (pharmacy-related setting)	PEL - Module 14 (non-traditional setting)	Exploratory project 1	Study abroad preparation program	Semester abroad	Pharmacy internship outside Quebec province I	Entrepreneurial know-how: the drive to create and to do	Entrepreneurial portfolio l	Entrepreneurial portfolio II	Introduction to research	Communication for scientists	Research internship I	Research internship II	
Regular degree	3 cr.	9 cr.	3 cr.	3 cr.	3 cr.											
Study abroad profile	3 cr.	3 cr.	S CI.	o CI.	o Ci.	3 cr.	12 cr.									
Entrepreneurial profile	3 cr.		3 cr.	3 cr.	3 cr.				3 cr.	3 cr.	3 cr.					
International health-care specialty	3 cr.	9 cr.				3 cr.		6 cr.								
Research in pharmaceutical sciences	3 cr.	6 cr.										3 cr.	3 cr.	3 cr.	3 cr.	

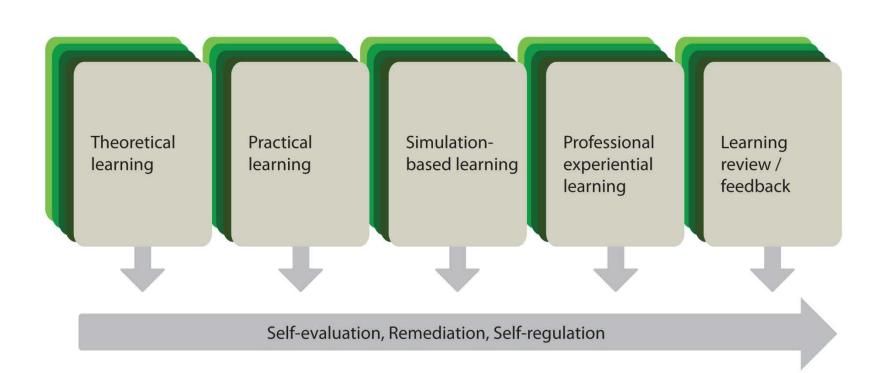


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#### The learning continuum in the Doctor of Pharmacy (PharmD)



#### Knowledge interconnectivity on the learning continuum

#### Theoretical learning

- The calling of a student
- The organization of the human body: biology, anatomy, physiology, pathology
- The drugs: pharmaceutical chemistry, pharmacology, science and pharmaceutical technology
- The pharmaceutical consultation: approach, documentation, communication
- The profession: history, legislation, management, the setting for the practice, ethics and professionalism

- · Computer laboratory
- Galenic pharmacy laboratory
- Sterile products laboratory
- Case studies
- · Role plays
- Practical work allows students to use and combine theoretical knowledge in the exercises as and when they acquire it. Training activities are organized in such a way as to enable constant shifting between these two types of learning.

#### Simulationbased learning

- This learning category enables the involvement of students in real work situations in a setting similar to professional practice.
- With this in mind, the Faculty of Pharmacy set up a teaching space, a laboratory for practice recreating a real pharmacy situation of 10 fully equipped mini-pharmacies where the simulation activities take place.
- The activities in this learning category precede each series of structured practice experience throughout all four years of the program.

The traditional form of learning based on work experience was reviewed from the perspective of integration and the continuum between previously acquired knowledge and that which follows once

students find them-

selves in a profes-

sional setting.

It is broken up into sequences and the content of each sequence is based on a progress map that underlies the structure of the entire program.

#### Learning review / feedback

- Following each structured practice experience sequence students reviews everything they have learned, first in a team of 32 students and then in a larger group of 192 students.
- This approach, which is an important feature of the program, enables students to appreciate the connection between what they have learned in the Faculty of Pharmacy and what they have experienced in the field.
- To this end, each sequence ends with a return to the Faculty of Pharmacy where feedback and reflection on all the learning takes place.

Practical learning

Professional experiential learning(PEL)



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## Professional experiential learning

### The professional setting:

- 1) The community pharmacy seting
- The healthcare institunional setting
- 3) The pharmacy-related setting (« connexe »)
- 4) The non-traditional setting (« non traditionnel »)

## Distribution of the professional experiential learning or structured practice experience according to setting and stage

	Community pharmacy setting	Healthcare institutional setting	Pharmacy related setting	Non-traditional setting	TOTAL
Stage I	2	0	0	0	2
Stage II	3	0	o	0	3
Stage III	9	3	o	0	12
Stage IV	9	9	3	3	24
TOTAL	23	12	3	3	41

Note: Figures indicate the number of weeks



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## Assessment of the courses (1)

- Rating from A+ to E (article 241 of the Règlement des études)
- Done using various evaluation tools (article 235)
- More than one assessment per course (article 239)
- Instructors in charge of these courses are also responsible for the assessments (article 258)

Règlement des études = official rules and regulations governing courses of study at Laval University

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## Assessment of the courses (2)

- Done using various evaluation tools (article 235)
  - Examinations
  - Exercises
  - laboratory reports
  - oral presentations
  - case studies
  - written or oral reports
  - summary tables, graphs...



### Assessment of PEL

- Score P (pass) or N (fail)
- By clinical practice instructor or preceptor

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### Pre-determined and commented self-assessment

- self-assessment undertaken by the students themselves
- to look critically at their learning
- is compulsory, and the result is entered in their learningprogress and passport folio (LPF)
- pre-determined evaluation grid
- is undertaken during the fall and winter session in Stages I and II, at the winter mid- term in Stage III and at the autumn mid- term in Stage IV
- no grade or score on academic record
- similar to an assessment-as-learning evaluation (article 237)



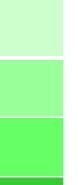
### Assessment of competencies and attitudes

- At the end of each stage (year)
- Student must show the expected competency outcome
- Based on learning-progress and passport folio (LPF)
- Based on performance appraisal : oral presentation
- In front of an assessment committee (stage I and III)
- Score P (pass) or N (fail)
- Assessment appears on academic record

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### Assessment of competencies and attitudes

Based on a 4 stage pathway:



Beginner (at the end of stage I)

Novice (at the end of stage II)

Intermediate (at the end of stage III)

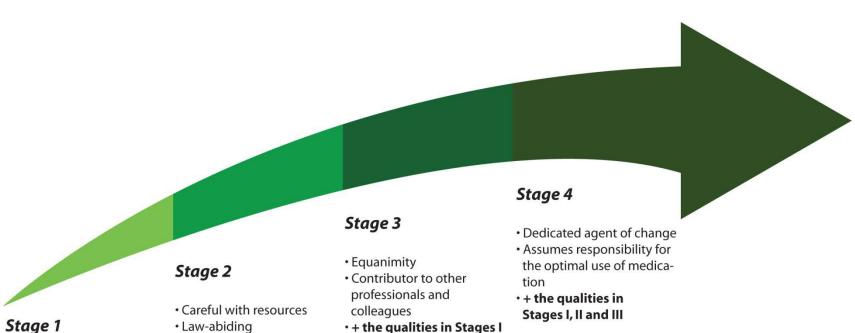
Competent (at the end of stage IV)



### Learning-progress and passport folio (LPF)

- used for two aspects of student assessment:
  - supporting them in the progression of their learning
  - □ facilitating the assessment of competencies and the appraisal of attitudes

#### Professional qualities gauged during each stage



and II

- Empathetic towards clients
- Inquisitive
- · Continually adding to and updating their knowledge
- · Attentive to professional image
- · Reflective on and in action

- Critically appraises information to be explained or conveyed
- Scrupulous regarding professional secrecy
- · Analytic in the approach to issues
- · + the qualities in Stage I

### N

### Ressources

- Teaching staff:
  - 26 professors
  - 13 teaching auxiliaries
    - (6 tutors « responsables d'encadrement »: 32 students /tutor)
  - 2 coordinators
  - 3 associates professors
  - 1emeritus
  - 48 clinical professors
  - ~100 lecturers
  - ~600 supervisors (including ~ 200 CEC)
- Administrative personale: 18
- Bruno Dubois: Education Advisor / Counselor

### LABORATOIRE DE PRATIQUE PROFESSIONNELLE



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### Conclusion

- An entry-level Doctor of Pharmacy program
- A professionalization approach
- A set of 5 professional competencies
- 14 professional qualities
- A competency developping plan (progress map)
- An expected grade outcome (beginner, novice, intermediate, competent)
- A learning continuum (theorical, practical, simulational and professional)
- Learning review feedback
- Integrative approach
- Assessment process
- Tutors
- 164 credits 5 pathway options