Université de Montréal

Capstone Program
A Tale of Clerkship Preparedness

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For student to be
CLERKSHIP READY

- **Knowledge**
  - Retention
  - Integration

- **Competenies, Capacities or Skills**
  - Knowledge Application
  - Critical Thinking and Decision Making
  - Communication
  - Pharmaceutical care
  - Practice Management
    - Norms, Standards, Rules Application

For students to be
ACTIVE, ENGAGE AND REFLECTIVE

- **Revisiting Knowledge**
  - Restructure / Synthetise / Assess Knowledge
  - Foster Integration (Context)

- **Build Self-Confidence**
  - Self-Efficacy Beliefs
  - Control Stress/ Anxiety
  - Determine Learning Objectives

For Professors to be
ENGAGE AND PROACTIVE

- **Embrace the Capstone Project**
  - Team Work
  - Common Objectives

- **Engage in**
  - Knowledge Integration
  - Active Learning

- **Assessment**
  - Alignment with outcomes
  - Meet the Feedback Challenge

For practice and academic to
COLLABORATE

- **Continuous quality Improvement**
  - Meeting Social and professionnal Needs
  - Identifying Students' Learning Needs
  - Identifying Curriculum Changes

- **Capstone Exam Committee**
  - Involving Preceptors/Teaching Coordinators
  - Exam Blueprinting
    - Relevance and Authenticity Tasks
  - Grading
  - Score Meaning
  - Setting Cut Score

UMontreal
Capstone Program

- **Pharmacy Practice Labs**
  - Capstone Mandate
  - Educational Methods (More diversity / more accountability)
    - Case-Based Approach
    - Argumentative / Reasoning Models

- **Exams**
  - End of each year
  - Higher Order Items
  - Competencies
  - Achievement / Progress

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Capstone Exam

- **Part 1: Knowledge Retention / Application**
  - MCQ (best answer), Key Features
- **Part 2: Critical Thinking / Decision Making**
  - Essay Type Items
  - Case-based
  - Decision and Arguments
- **Part 3: OSCE (7 stations)**
  - 6 Standardized Patient
  - 1 Prescription validation Drill

CAPSTONE Exam
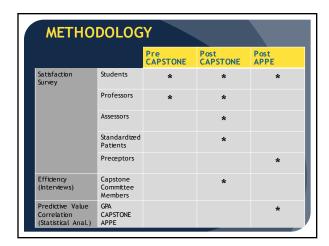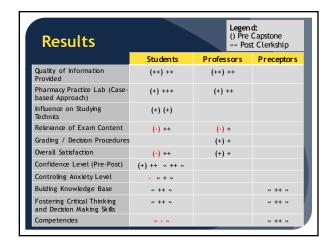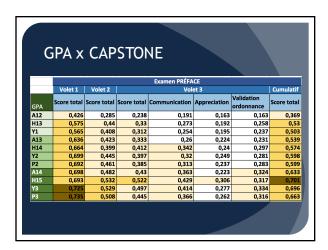## GRADING AND CUT SCORE SETTING

- Compensatory vs Conjonctive Approach
- Must Pass all Three Parts
- Cut Score (Normative Approach)
- Remediation Exam Available

METHODOLOGY

		Pre CAPSTONE	Post CAPSTONE	Post APPE
Satisfaction Survey	Students	*	*	*
	Professors	*	*	
	Assessors		*	
	Standardized Patients		*	
	Preceptors			*
Efficiency (Interviews)	Capstone Committee Members		*	
Predictive Value Correlation (Statistical Anal.)	GPA CAPSTONE APPE			*

Results

Legend:
() Pre Capstone
«» Post Clerkship

	Students	Professors	Preceptors
Quality of Information Provided	(++) ++	(++) ++	
Pharmacy Practice Lab (Case-based Approach)	(+) +++	(+) ++	
Influence on Studying Technics	(+) (+)		
Relevance of Exam Content	(-) ++	(-) +	
Grading / Decision Procedures		(+) +	
Overall Satisfaction	(-) ++	(+) +	
Confidence Level (Pre-Post)	(+) ++ « ++ »		
Controling Anxiety Level	- « + »		
Bulding Knowledge Base	« ++ »		« ++ »
Fostering Critical Thinking and Decision Making Skills	« ++ »		« ++ »
Competencies	« - »		« ++ »

GPA x CAPSTONE

		Examen PRÉFACE					
	Volet 1	Volet 2	Volet 3				Cumulatif
GPA	Score total	Score total	Score total	Communication	Appreciation	Validation ordonnance	Score total
A12	0,426	0,285	0,238	0,191	0,163	0,163	0,369
H13	0,575	0,44	0,33	0,273	0,192	0,258	0,53
Y1	0,565	0,408	0,312	0,254	0,195	0,237	0,503
A13	0,636	0,423	0,333	0,26	0,224	0,231	0,539
H14	0,664	0,399	0,412	0,342	0,24	0,297	0,574
Y2	0,699	0,445	0,397	0,32	0,249	0,281	0,598
P2	0,692	0,461	0,385	0,313	0,237	0,283	0,599
A14	0,698	0,482	0,43	0,363	0,223	0,324	0,633
H15	0,693	0,532	0,522	0,429	0,306	0,317	0,701
Y3	0,725	0,529	0,497	0,414	0,277	0,334	0,696
P3	0,735	0,508	0,445	0,366	0,262	0,316	0,663

CAPSTONE x APPE

		Examen PRÉFACE					
	Volet 1	Volet 2	Volet 3				Cumulatif
	Score total	Score total	Score total	Communication	Appreciation	Validation ordonnance	Score total
4510_auto évaluation	0,067	0,071	0,007	-0,044	0,099	-0,009	0,062
4510_formative	0,111	0,189	0,09	-0,015	0,188	0,191	0,172
4510_certificative	0,15	0,16	0,136	0,057	0,144	0,181	0,191
4520_auto évaluation	-0,044	0,06	-0,115	-0,16	0,038	-0,065	-0,038
4520_formative	0,114	0,016	0,098	0,083	0,042	0,003	0,084
4520_certificative	0,108	-0,038	0,069	0,02	0,124	-0,029	0,042
4530_auto évaluation	0,104	0,033	0,024	-0,016	0,003	0,052	0,038
4530_formative	0,121	0,214	0,205	-0,031	0,117	0,047	0,149
4530_certificative	0,319	0,244	0,235	0,161	0,320	0,37	0,353
4540_auto évaluation	0,048	0,028	-0,158	-0,254	0,117	0,043	-0,053
4540_formative	0,208	0,165	0,094	-0,028	0,223	0,269	0,183
4540_certificative	0,367	0,236	0,305	0,221	0,234	0,272	0,366

GPA x APPE

GPA	4510 Auto évaluation Score total	4510 Formative Score total	4510 Certificative Score total	4520 Auto évaluation Score total	4520 Formative Score total	4520 Certificative Score total	4530 Auto évaluation Score total	4530 Formative Score total	4530 Certificative Score total	4540 Auto évaluation Score total	4540 Formative Score total	4540 Certificative Score total
A12	0,117	0,275	0,199	0,141	0,24	0,19	0,203	0,075	0,237	0,079	0,241	0,125
H13	0,071	0,171	0,181	0,042	0,231	0,128	0,075	0,134	0,247	-0,009	0,247	0,223
Y1	0,101	0,233	0,207	0,086	0,25	0,165	0,149	0,127	0,263	0,032	0,271	0,198
A13	0,092	0,208	0,167	0,032	0,11	0,123	0,122	0,165	0,283	0,083	0,152	0,223
H14	0,118	0,199	0,172	-0,041	0,115	0,035	0,148	0,141	0,381	0,113	0,209	0,327
Y2	0,112	0,22	0,182	0	0,121	0,091	0,143	0,166	0,35	0,105	0,192	0,291
P2	0,117	0,243	0,207	0,039	0,193	0,13	0,158	0,163	0,339	0,082	0,238	0,267
A14	0,055	0,196	0,113	-0,135	0,236	0,149	0,106	0,086	0,358	0,073	0,212	0,393
H15	0,104	0,225	0,18	0,033	0,274	0,142	0,03	0,2	0,357	0,138	0,215	0,399
Y3	0,083	0,22	0,153	-0,053	0,267	0,153	0,071	0,149	0,372	0,111	0,224	0,415
P3	0,11	0,245	0,196	0,006	0,232	0,146	0,131	0,166	0,368	0,099	0,243	0,339

WHAT'S COMING NEXT

- **2015-2016 CAPSTONE 2nd Administration**
  - OSCE Rubric MINOR Changes
  - Continue Observing relation between GPA x CAPSTONEx APPE

- **CAPSTONE PROGRAM: Phase 2**
  - Year 1 and Year 2
  - Pharmacy Practice Lab Reingeneering
  - Major Review in OSCE Rubrics
  - OSCE: iPad integration

- **GRADING**
  - Explore Conjunctive Grading Approach
  - Setting Cut Scores

Thank You

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