



Planning for the Future



#### The current state of curricula

"As for what passes as a college curriculum, almost anything goes. We have reached a point at which we are more confident about the length of a college curriculum than its content and purpose. Indeed, the major at most colleges is little more than a gathering of courses taken in one department, lacking structure and depth."

Association of American Colleges and Universities (1985)

Integrity in the College Curriculum: A Report to the Academic Community

#### What is a Curriculum?

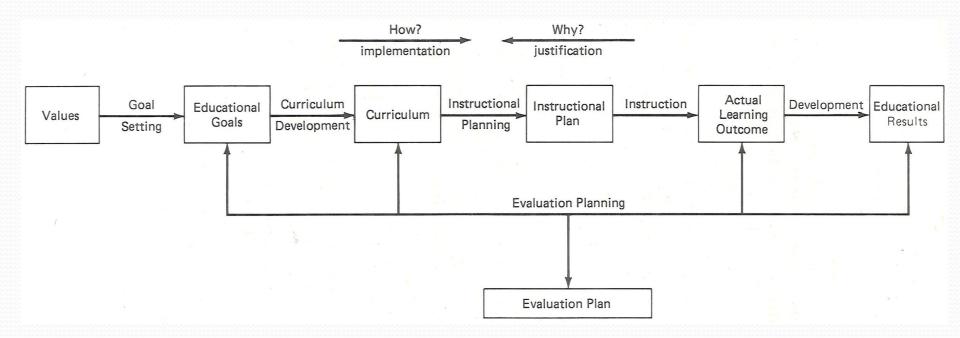
 A curriculum is intended to be a structured list of what our students need to know and a deliberate plan of how to get there.

# Curriculum vs Pedagogy

- Curriculum:
  - What is to learned, intentions, learning outcomes
- Pedagogy:
  - An instructional plan
  - How the curriculum will be taught
- In some cases, curriculum and pedagogy are used interchangeably. eg,. "Curriculum will thus necessarily include goals, values and modes of activity thought to be appropriate or necessary in order for desierable learning to occur." (OECD, 1990).

#### Curriculum Instruction Model

(Posner & Rudnitsky, 1980)



### Goals, courses and curriculum

- As teachers, we often think in terms of "our courses."
  - Each course is only a small part (2-3%) of the whole curriculum

"As we teach our courses, we tend to lose sight of the fact that each course is but one element in a learning sequence defined as a curriculum. The closer the relationships are among courses, curriculum, and planned out-of-class activities, the more effective the learning experience will be for our students. ... A quality education requires a level of orchestration seldom found at colleges and universities as well as the active involvement of a faculty that is paying a great deal of attention to structure, content and process."

(Diamond, 2008)

# Favourable conditions for Curricular Renewal

- 1. "Curriculum Renewal at Ryerson University: White Paper"
  - Student flexibility and choice
  - Curricular rigour and depth
  - Well-rounded graduates, with a breadth of knowledge
  - QA processes toward meeting educational objectives, including critical thinking and writing skills
- 2. Changes within industry introduce new topics of relevance
- 3. Program size makes a greater element of choice possible
- 4. A survey of comparator programs and other programs within the institution suggests that choice in the core subjects is the norm
- 5. Periodic Program Review (PPR)

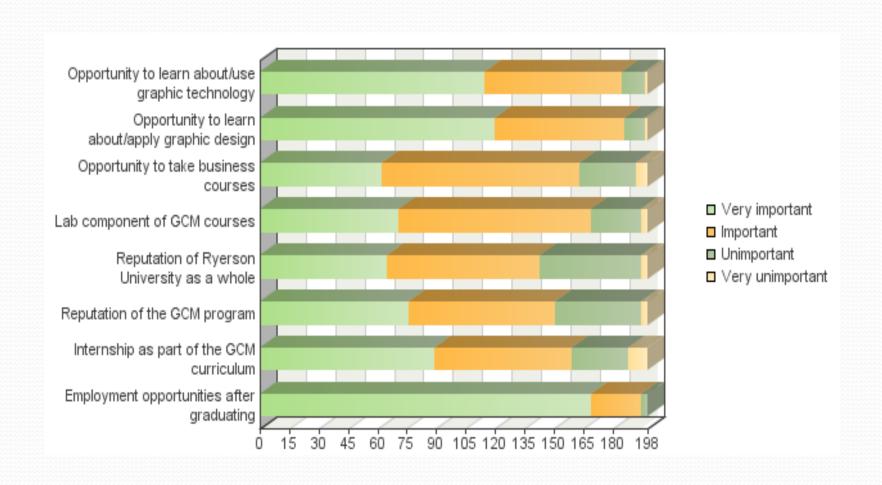
#### **Process**

- 1. Study the steps necessary for curricular change
- 2. Form a Curriculum Committee
- 3. Consult with stakeholders
  - Leadership of the university
  - Curriculum experts
  - Students
    - Focus group; online survey; "town hall"
  - Faculty
    - Briefed regularly; curriculum mapping of graduate attributes and program goals (Learning Outcomes)
- 4. Scan of comparator programs
- 5. Engage in "blue sky" thinking
- 6. Draft a curriculum which addresses the institutional curricular framework and policies
- 7. Share, revise and refine based on input from stakeholders, including industry
- 8. Obtain approval
- 9. Implement

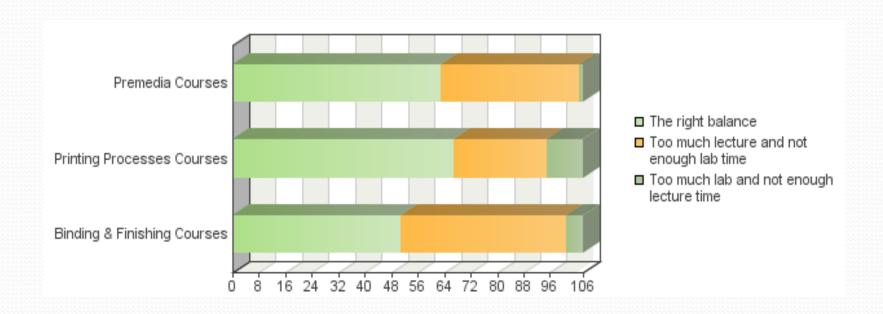
## Student Survey

- Online anonymous student survey
  - 31 questions developed by committee
- Survey developed using Opinio with user authentication
- Delivered online over a period of 2 weeks
- 198 validated respondents
- Results shared

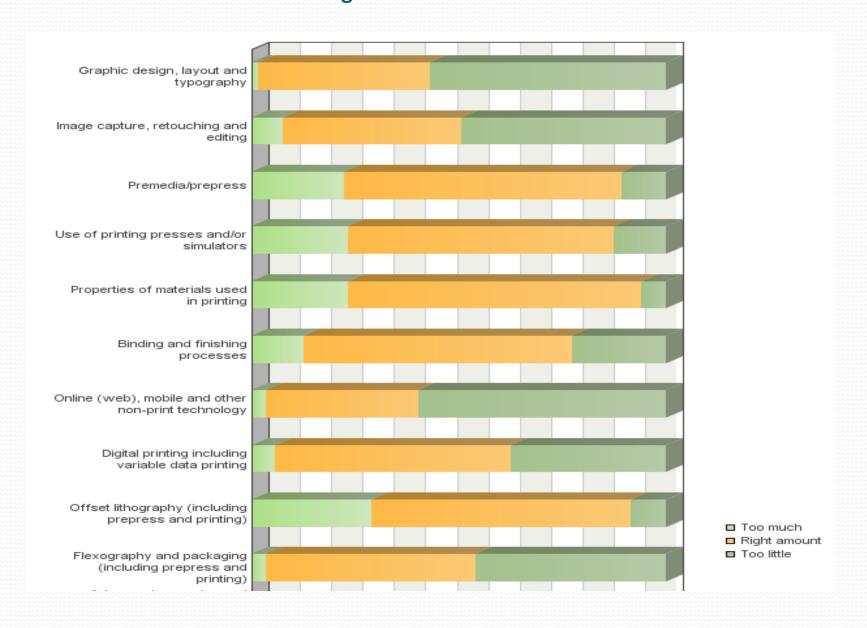
#### Thinking about when you applied to GCM, how important was each of the factors below in influencing your decision to come to GCM?



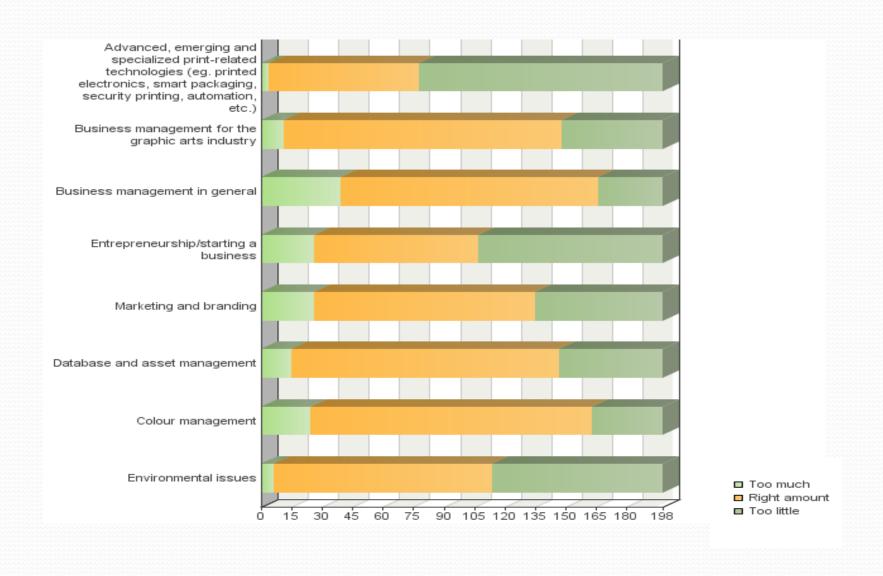
Most GCM core courses (GRA course codes) include both lectures and labs. In each course area would you say that you have the (i) right balance of lecture and lab time, (ii) too much lecture and not enough lab time, or (iii) too much lab time and not enough lecture time?



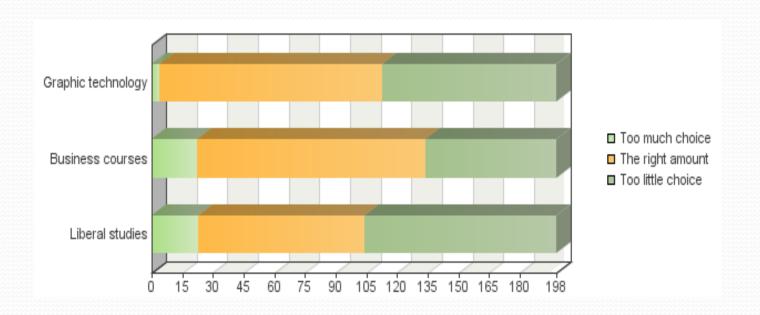
### Considering the entire GCM curriculum, does GCM focus too much, the right amount, or too little on each of the following areas?



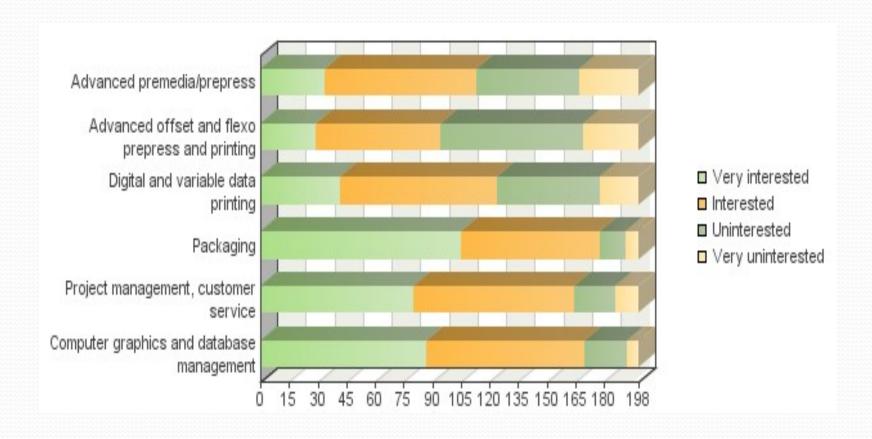
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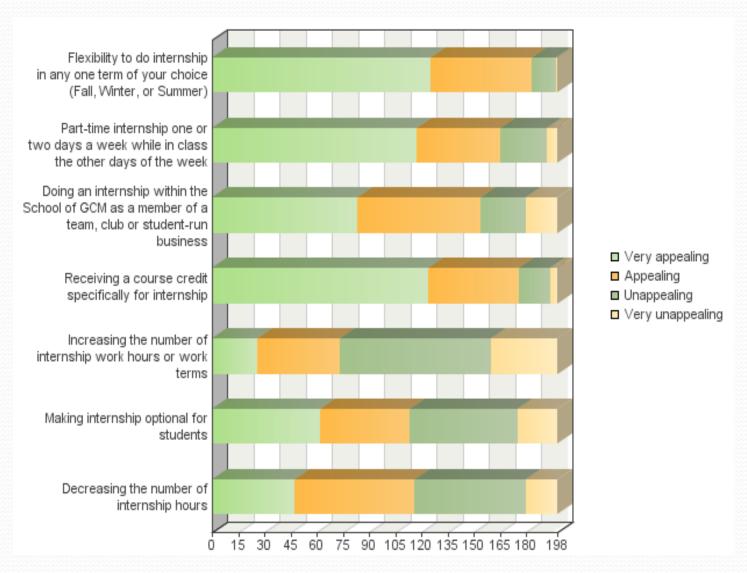
The current GCM curriculum includes mandatory courses and elective courses. In each of the areas below, does GCM offer too much choice, the right amount of choice, or too little choice?



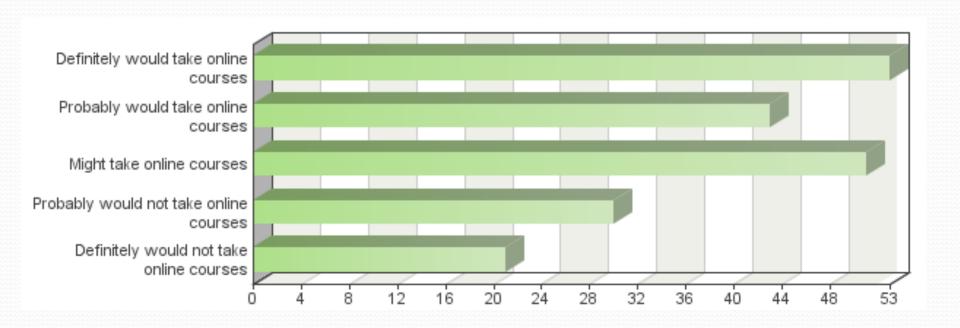
GCM is considering offering the ability in senior year to choose courses to specialize in one or more concentrations that would be shown on your transcript. A concentration is 6 specialized courses within your core subject area. How interested would you be in each of the following concentrations?



### Consider each of the following different possibilities for internship. How appealing would each be to you?



If GCM were to increase the number of courses available online, how likely would you be to take courses online, as opposed to in a regular classroom or lab?



## Faculty consultation

- Graduate attributes
  - Knowledge, skills and attitudes
- Program Goals
- Learning Outcomes
- Map each outcome to courses
  - I = Introduce
  - R = Reinforce
  - P = Proficient
- Identify gaps and areas of overlap

## Findings

- The outcome of the student survey was consistent with with the guiding principles of the Curriculum Renewal white paper.
- Flexibility is important to students
- Concentrations, formally recognized, are popular
- Internship is valued, but there is interest in increasing the flexibility of the internship program
- The faculty curriculum mapping exercise revealed some gaps and overlaps. There is room to improve how some learning outcomes are covered, especially in technical and technology outcomes.

### Next steps

- Review the available information
  - Use the key findings of the survey and other consultations
  - Drill down into survey information by year of study
  - Consider "best practices" at comparator programs
- Develop a draft curriculum
  - Curriculum -> Courses -> Units (increasing specificity)
  - Map the draft curriculum to program goals, revise
- Consult
- Obtain approval
- Implement

### Acknowledgements

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- Paola Borin (Curriculum Development Consultant)