

Curriculum Mapping Guidelines (adapted from RIT)

Curriculum mapping is a method to align instruction with desired goals and program outcomes. It can also be used to explore what is taught and how. The map:

- Documents what is taught and when
- Reveals gaps in the curriculum
- Helps design an assessment plan

What does a curriculum map look like?

It's a table with one column for each learning outcome and one row for each course or required event/experience (or vice versa: each row contains a course and each column lists a learning outcome). The following is an excerpt from hypothetical biology program curriculum map.

Key: "I"=Introduced; "R"=reinforced and opportunity to practice; "M"=mastery at the senior or exit level; "A"=assessment evidence collected

Courses and Experiences	Program Learning Outcomes			
	Apply the scientific method	Develop laboratory techniques	Diagram and explain major cellular processes	Awareness of careers and job opportunities in biological sciences
BIO 101	I	I		I
BIO 202	R	R	I	
BIO 303	R	M, A	R	
BIO 404	M, A		M, A	R
Other: Exit interview				A

How is a curriculum map created?

Step 1: Faculty members begin with:

- the program's intended student learning outcomes
- recommended and required courses
- other required events/experiences (e.g., internships, research, co-op)

Step 2: Create the "map" in the form of a table (see options provided).

Step 3: Enter the student learning outcomes and courses and events/experiences into the map that currently address those outcomes.

Step 4: Enter an indicator of level for each learning outcomes and course/experience

- Enter an "I" to indicate students are **introduced** to the outcome
- "R" indicates the outcome is **reinforced** and students afforded opportunities to practice
- "M" indicates that students have had sufficient practice and can now demonstrate **mastery**
- "A" indicates where evidence might be collected and evaluated for program-level assessment (collection might occur at the beginning and end of the program if comparisons

across years are desired).

Step 5: Faculty members analyze the curriculum map. They discuss and revise so that each outcome is introduced, reinforced/practiced, and then mastered. In addition, each outcome should have at least one "A" to indicate that evidence can be collected for program-level assessment. Not every outcome is assessed every semester, the timeline for collection will be indicated on the assessment plan.

What are some curriculum mapping best practices?

- Build in practice and multiple learning trials for students: introduce, reinforce, master. Students will perform best if they are introduced to the learning outcome early in the curriculum and then given sufficient practice and reinforcement before evaluation of their level of mastery takes place.
- Use the curriculum map to identify the learning opportunities (e.g., assignments, activities) that produce the program's outcomes.
- Every course does not need to help students meet every outcome – aim for no more than 2-3 outcomes for any one course
- Ask if the department/program is trying to do too much. Eliminate outcomes that are not highly-valued and then focus on highly-valued outcomes by including them in multiple courses. (The eliminated outcomes can still be course-level outcomes. They need not disappear completely from the curriculum.)
- Set priorities as a department/program. Everyone working together toward common outcomes can increase the likelihood that students will meet or exceed expectations.
- Communicate: Publish the curriculum map and distribute to students and faculty.
- Communicate: Each faculty member can make explicit connections across courses for the students. For example, at the beginning of the course or unit, a faculty member can remind students what they were introduced to in another course and explain how the current course will have them practice or expand their knowledge. Students do not always make those connections by themselves.

Completed Curriculum Map Sample 1 – A Cultural Resources Program – A work in progress

REQUIRED COURSES AND EXPERIENCES	Program Level LEARNING OUTCOMES						
	Demonstrate knowledge of key historical material, theoretical perspectives, institutional practices, and legal and ethical concerns.	Analyze and identify the materials from which historical and or artistic objects are made.	Develop visual and hand skills for recognizing and analyzing materials that compose cultural objects and processes by which they have been constructed.	Develop appropriate research skills.	Analyze the conservation needs of an object and identify best practices.	Illustrate research and computer skills.	Exhibit knowledge of actual museum work through personal experience.
0533-370 Intro to Museums Collecting	I, A		I	I		I	I
0533-422 Art Materials and Photography	R	I, A	R	R	I		
0533-423 Artists' Materials: Panel Paintings		R					
0533-424 Legal and Ethical Issues for Collecting Institutions	R		R, A			R	
0533-425 Display and Exhibition		R			R, A		
0533-426 Collections, Management & Museum Administrators			R				
0533-427 Fundraising, grant Writing & Marketing for Nonprofits				R,A			
0533-437 Forensic Investigation	R	R, A				R	
0533-438 Art Conservation					R		
0533-510				R		R,A	R
Internship	M	M	M	M	M	M	M,A

(I = Introduce; R= Reinforce; M = Mastery; and A = Assessment Opportunity)