

How to Develop Your New Program

Map the Curriculum

There are many ways to map a curriculum. The goal of mapping is to produce a diagrammatic representation of the program, showing the organization and interrelationship of all courses (much like a blueprint).

For new program proposals, the document is formatted as a program map that names clusters of common courses and all associated individual courses.

Another valid format is the competency profile.¹ Typically used for trades-related programs, such profiles lay out the curriculum in terms of competency clusters (general areas of competence) and associated skill sets or competencies.

In either case, the purpose is to provide a snapshot of the whole program that illustrates:

1. The range of related subjects or general areas of competence (vertical integrity of the curriculum)
2. The developmental sequence of learning (horizontal integrity of the curriculum)
3. Relative weighting of subjects/competencies in terms of hours and percentage of overall curriculum

A Mapping Method

Best results for an integrated curriculum are created by group effort. It should take about an afternoon to generate a rough program map that is sufficient to provide faculty with a roadmap for development of course outlines.

Gather as many program faculty together as possible, including faculty from associated disciplines and academic studies. The IDC on your School Working Group can help facilitate this session.

1. Start with the anticipated result and work backward from there, using the program goals in the concept paper for reference.
2. Brainstorm each program goal statement in turn, answering the question: "In general, what knowledge, skills, and practical experience would a student need to learn to achieve this goal? Write every answer on a sticky note and post them on a handy wall.
3. Step back and look for patterns. Regroup the stickies into "clusters of commonality." Give each cluster a descriptive name; for example, Applied Academics, Technical Knowledge, Technical Skills, Applied Skills, Communication, Computer Skills, Design, Troubleshooting. These clusters form the *vertical integrity* of your curriculum. (See example on the next page.)

¹ This 'How To' document focuses on how to generate a program map. For assistance in developing a competency profile, please contact your [LTC School Liaison](#).

4. Start sequencing items within each cluster from simple to complex, from concrete to abstract, or by some other mutually agreeable principle. This begins the *horizontal integrity* of your curriculum that eventually gets mapped by term/level and developed into individual courses. Ideas for new course names will likely start leaping out at you during this process. Feel free to add, modify, or prune redundancies as you need to.
5. Tentatively assign each descriptive cluster a weighting relative to the curriculum as a whole; for example, Applied Academics 15%, Technical Skills 25% and so forth. This process reveals the balance among program elements and leads eventually to assigning course credits and teaching loads.
6. Transcribe the rough map into a spreadsheet in Excel or a table in Word. Recruit clerical support for this step. Your rough working map and notes might look something like the example below. It should preserve enough details to help in course development.
7. Distribute copies to the working group, to faculty in your department, and to other academic stakeholders as appropriate (e.g. Academic Studies faculty) for reflection and comment.

Example of a rough working map

Clusters	Level 1	Level 2	Level 3	Level 4	Weighting
Technical Knowledge & Understanding	WDAM xxxx Widget Design Principles 1 • knowledge • skill • knowledge • skill (Bill B)	WDAM xxxx Widget Design Principles 2 • knowledge • skill (Fred M)	WDAM xxxx Codes & Regs • regs.1-14.7 • associated codes (Art L.)		20% x credits
Applied Technology (applied knowledge & understanding of practice)	WDAM xxxx Widget Construction 1 • knowledge • skill (Bill B)	WDAM xxxx Widget Construction 2 • knowledge • skill (Bill B)	WDAM xxxx Digital Widget Project 1 • knowledge • skill (Angie S)	WDAM xxxx Digital Widget Project 2 • knowledge • skill (Fred M)	40% X credits
Computer		CIVL 2003 Computer-Aided Design • skills • skills • skills • skills	CIVL 300X CAD Lab (see project #2) • scaling		15% x credits
Applied Sciences	CHEM 1XXX • organic analysis	PHYS 2999 Physics of Widgetry			25% x credits



Clusters	Level 1	Level 2	Level 3	Level 4	Weighting
	<ul style="list-style-type: none"> sample prep techniques 	<ul style="list-style-type: none"> knowledge knowledge skills 			
	Math 1098 Basic Measurem'nts in Widgetry <ul style="list-style-type: none"> trig (Rachel F.)	Math 2xxx <ul style="list-style-type: none"> orthogonal projection scalars 		MATH 4998 Applied Statistics in Widgetry (Art B.)	
Communication	COMM 1999 <ul style="list-style-type: none"> basic writing reading manuals (Susan P.)	COMM 2999 <ul style="list-style-type: none"> presentations 	COMM 3999 Preparing Technical Reports (Susan P.)	COMM 4999 Analysis of tech reports and studies	

From Working Program Map to Course Outlines

In an iterative process, you can anticipate going forward and backward. If most faculty agree that the working map is a reasonable starting place, the next step forward is for individual faculty members to think about and prepare draft course outlines, at least to the level of course description and learning outcomes. Practical suggestions:

- Be mindful that “the devil is in the details” and individual thought and research will undoubtedly send the group back to modifying the map a few times. This is healthy and productive.
- Be clear about who’s doing what. Add faculty names to the working map if this helps.
- Set a firm deadline for submission of course outlines.
- Encourage cross consultation among faculty working on course outcomes at progressive levels of difficulty. Nothing is worse than assuming you’re building upon expected learning outcomes that aren’t actually there!

Template for the Final Program Map

When ready to finalize your working map, use the Program Map template on the [LTC website](#). This will be a key document for the Stakeholder meeting and it will become one of the appendices in your proposal.