

KS Curriculum Management 2.0 Functional Overview

(CM 2.0) 1. Overview	
(CM 2.0) 1.1 Summary of Features Included in KS Curriculum Management 2.0	3
(CM 2.0) 1.2 Configuring KS Curriculum Management for Your Institution	3
(CM 2.0) 2. Course Management	3
(CM 2.0) 2.1 Course Information	3
(CM 2.0) 2.1.1 Course Requisite Rules	4
(CM 2.0) 2.2 Course Processes	4
(CM 2.0) 3. Program Management	4
(CM 2.0) 3.1 Program Information	4
(CM 2.0) 3.2 Program Processes	
(CM 2.0) 4. Course Set Management	5
(CM 2.0) 5. Learning Objectives Management	5
(CM 2.0) 6. Organization, People and Roles Management	6
(CM 2.0) 7. Reference Implementation Configuration	
(CM 2.0) Field Requiredness by Workflow Node Configuration	7
(CM 2.0) Organization Configuration	11
(CM 2.0) Subject Areas and Curriculum Org Relationship Configuration	
(CM 2.0) User Configuration	14
(CM 2.0) Workflow Configuration and Associated Users	15
(CM 2.0) 8. Course and Proposal States	18

KS Curriculum Management 2.0 Functional Overview

(CM 2.0) 1. Overview

This document provides an overview of the functionality delivered in Kuali Student Curriculum Management 2.0, including course and program management. The audience for this document is primarily business analysts who need to translate an institution's business requirements of subject matter experts into configuration requirements. The KS Curriculum Management 2.0 Configuration Guide contains the details for how to change the system to meet institutional requirements, while this document provides an overview of how the Kuali Student System is configured as delivered.

(CM 2.0) 1.1 Summary of Features Included in KS Curriculum Management 2.0

Below is a summary of the features available in KS Curriculum Management 2.0. These features are covered in more detail later in this document. For an exhaustive list of features included in KS Curriculum Management 2.0, see the KS Curriculum Management 2.0 Feature Matrix.

1. Course Management

- a. New courses are created and existing ones modified or retired through a proposal process that allows users to collaborate on a proposal, and then submit the course for review. The system determines reviewers and the review path based on roles within the institution.
- b. Curriculum managers can use special administrative screens to create, modify, or retire courses. These streamlined screens allow users to manage the course inventory without using the standard proposal's curriculum review process.
- c. Courses may also be searched for and browsed.

2. Program Management

- Academic programs are created and modified by curriculum managers using special administrative screens. Undergraduate and graduate academic programs are defined by identifying descriptive information, requirements, learning objectives and governance and oversight.
- b. Existing programs also can be modified through a proposal process similar to course management, which supports collaboration, workflow routing, and approval.
- c. Programs may also be searched for and browsed.

3. Course Set Management

Sets of courses can be defined and named for use in managing rules for courses (e.g. prerequisites) and programs (e.g. completion requirements).

4. Learning Objectives Management

a. Learning objectives provide a way to manage the inventory of learning objectives. A learning objective is a statement that describes the knowledge, skills or abilities that a student would expect to gain by participating in a course or program. KS Curriculum Management provides tools to categorize, search, and re-use learning objectives.

5. Dependency Analysis

a. Dependency analysis reports demonstrate relationships among curriculum components by showing the courses, programs, and course sets that use a selected course. This is particularly useful for understanding the potential impact of curricular changes.

6. Organization and Workflow

a. Information about the people and organization within an institution is maintained through Kuali Identity Management (KIM). The roles assigned to people through their affiliation and position in the organization defines the approval path for courses and programs. Details on what roles are required in the approval process are maintained though Kuali Enterprise Workflow (KEW).

(CM 2.0) 1.2 Configuring KS Curriculum Management for Your Institution

KS Curriculum Management can be configured for your institution's specific business processes and requirements. What information is specified for a course or program proposal, what information is required and who is involved in the approval process are fully configurable as detailed in the KS Curriculum Management 2.0 Configuration Guide. A business analyst who understands the business requirements of the institution will need to work with a Java developer to implement most configuration changes.

(CM 2.0) 2. Course Management

KS Curriculum Management provides functionality for proposing, approving, modifying, and activating courses that can then be published in a course catalog. Curriculum managers can also retire courses. What information is specified for a course is fully configurable by the institution.

(CM 2.0) 2.1 Course Information

KS Curriculum Management provides the means to record the details of a course. You can configure Curriculum Management to present and require data fields based on your institution's specific business requirements. The following is a summary of the information that is included in KS Curriculum Management as it is delivered:

1. Course Information

a. General information about a course, including the title (with options for displaying differently in the catalog or transcripts), instructor(s) for the course, the course description and the rationale for proposing a new course or modifying an existing one

2. Governance

a. The organizations responsible for oversight and administration of the course and the campus locations that will offer the course. The selected value for the Curriculum Oversight field will determine what organizations need to be involved in the review and approval of the course. Based on this information, KS Curriculum Management determines the approval path for the course creation or modification proposal.

3. Course Logistics

a. Specifics such as in what term(s) the course is typically offered, the duration of the course, how grades and assessments will be conducted and recorded for the course, whether a student can audit the course, the course format (lecture, lab, etc.), and the outcome of the course such as credits awarded.

4. Learning Objectives

a. Identifies the expected outcomes the student will achieve upon successful completion of the course. Categories can be assigned to learning objectives in order to reflect institutional taxonomies or classification schemes.

5. Course Requisites

a. Course requisite rules identify requirements for enrolling in the course, such as specific courses, previous credits, enrollment in a program, grade-point averages, etc. Co-requisites, Recommended Preparation, Antirequisites, Courses that Restrict Credit, and Courses Repeatable for Credit also can be defined.

6. Active Dates

a. Specifies the term during which the course will become active for students to enroll, whether the course is a one-time/pilot course, and, if applicable, the term for which the course will no longer be offered.

7. Financials

a. Identifies any fees associated with the course as well as the organizations associated with revenue generated and expenditures incurred by offering the course.

8. Authors and Collaborators

a. Identifies specific people not on the standard approval path who can edit, comment or view the course proposal.

9. Supporting Documents

a. Allows additional files, such as a syllabus, to be attached to the course.

(CM 2.0) 2.1.1 Course Requisite Rules

Course requisites are structured rules that define a student's eligibility to enroll in a course. What requisites are available for selecting can be configured to suit an institution's specific needs. Examples of requisites defined in KS Curriculum Management as delivered include:

- Courses the student must have completed before enrolling in this course.
- Minimum GPA or specific grades in another course or set of courses.
- · Enrollment in a specific program.
- Previously completed courses that would make a student ineligible to take this course.

The rules are defined using drop-down lists to construct structured rules statements. These rules statements can then be used by an online enrollment application to determine if a student is eligible for a course.

(CM 2.0) 2.2 Course Processes

There are a number of activities that a course navigates throughout its lifetime. KS Curriculum Management 2.0 provides the following processes by which to manage courses:

1. Create a Course

- a. Someone at the institution proposes a new course, supplying the necessary information, such as requisites, instructors, times offered, financial information, etc. The person who initiates the proposal can identify collaborators who can also edit or review the course information. Once submitted, KS Curriculum Management routes the proposal to the appropriate people based on their roles within the institution.
- b. Proposals can be created from scratch or can be copied from existing approved or proposed courses. Copied proposals include pre-populated data from the source course. The fields that get copied are configurable by an implementing institution.
- c. Curriculum managers can be authorized to access special administrative screens to create a course. Administrative screens are streamlined for faster data entry, allow the user to hide non-required fields, and do not require proposed courses to go through the standard review and approval process.

2. Modify a Course

- a. An approved course may be modified through the proposal process similar to a new course.
- b. Curriculum managers can also be authorized to access special administrative screens to modify a course. Using these special screens, the curriculum manager can choose whether to modify an existing version of the course or to create a new version, and the modification is not required to go through the standard review and approval process.

3. Retire a Course

- a. An approved course may be retired through the proposal process, indicating important information like the last term in which the course can be offered and retirement rationale.
- b. Curriculum managers can be authorized to access a special administrative screen to retire a course. Using this streamlined screen, the curriculum manager can retire a course and is not required to go through the standard review and approval process.

(CM 2.0) 3. Program Management

KS Curriculum Management provides functionality for creating, modifying. approving, and activating undergraduate and graduate degree-granting academic programs. What information is specified for a program is fully configurable by the institution.

(CM 2.0) 3.1 Program Information

KS Curriculum Management provides the means to manage the details of a degree program. You can configure KS Curriculum Management to present and require data fields based on your institution's specific business requirements. The following is a summary of the information that is included in KS Curriculum Management as it is delivered:

1. Key Program Information

a. Information about a program such as the title, degree type, the title of the program (with alternatives for transcripts and diploma), the term during which it will first be offered and campus locations where it is offered.

2. Program Managing Bodies

a. What organizations are responsible for oversight and administration of the program. For modify program proposals, the specified value for the Curriculum Oversight Unit field will determine what organizations need to be involved in the review and approval of the program. Based on this information, KS Curriculum Management determines the approval path for the program modification proposal.

3. Specializations

a. Sub-programs within a given program that can be either optional or required to complete the program. All of the information collected for a parent program can be collected for a child specialization. The system verifies that certain specialization information, such as managing bodies and start/end terms, is valid when compared to the parent program.

4. Description and Catalog Information

a. A description of the program, including alternative text for publication in the catalog, the duration of the program (four year, two year, etc.) and the core faculty members for the program.

5. Program Requirements

a. Requirements for entering the program, progress requirements for satisfactory performance to remain in the program, and requirements for completing the program.

6. Learning Objectives

a. Identifies the expected outcomes the student will experience upon successful completion of the program. Learning Objectives can be specific to the program or they can be standard learning objectives that are assigned to more than one program.

7. Supporting Documents

a. Allows additional files, such as a syllabus or letter, to be attached to the course.

(CM 2.0) 3.2 Program Processes

There are a number of activities that a program navigates throughout its lifetime. KS Curriculum Management 2.0 provides the following processes by which to manage programs:

1. Create a Program

- a. A curriculum manager can use special administrative screens to create a new program, supplying the necessary information. The program can then be approved and activated by the curriculum manager.
- b. Note that the program creation process does not utilize a proposal process that utilizes review and approval workflow like the course creation process.

2. Modify a Program

- a. Someone at the institution proposes changes to a program, supplying the necessary information. The person who initiates the proposal can identify collaborators who can also edit or review the course information. Once submitted, KS Curriculum Management routes the proposal to the appropriate people based on their roles within the institution.
- b. Curriculum managers can be authorized to access special administrative screens to modify a program. The curriculum manager can choose whether to modify an existing version of the program or to create a new version.

(CM 2.0) 4. Course Set Management

KS Curriculum Management allows you to create groups of courses that can then be referenced by other processes. In Release 2.0, course sets are used when creating course requisite rules or program requirements. The following are example uses for this feature:

1. Course Requisite Rules: Multiple Choice Prerequisites

a. A set of courses from which a student must take one, but not all, to be eligible to enroll in a subsequent course.

2. Program Requirements: Core Courses

a. A defined set of courses that all students, or all students within a program, must complete.

Course sets may be fixed or dynamic lists of courses. A fixed course set is defined by explicitly adding courses to the list by course number (MATH101, MATH102, MATH103, etc.). A dynamic course set is defined by applying some criteria, such as any 100-level course in the Mathematics department. As courses are added that meet the criteria, they are automatically added to the dynamic course set.

(CM 2.0) 5. Learning Objectives Management

Learning objectives provide a way to manage the inventory of learning objectives. A learning objective is a statement that describes the knowledge, skills or abilities that a student would expect to gain by participating in a course or program. KS Curriculum Management provides tools to categorize, search, and re-use learning objectives.

The key principles of a learning objective include:

- 1. It is specific.
- 2. It is measurable/observable
- 3. It is attainable
- 4. It is relevant and results-oriented
- 5. It is targeted to the learner and the desired level of learning.

Learning objectives can range from a simple statement describing the student's expected mastery of some aspect of the subject to an specific certification. A learning objectives can be attached to any number of programs or courses that have that objective as an expected outcome.

Learning Objective Hierarchies

1. Learning objectives can be maintained in hierarchies with levels and sublevels if desired. Learning objectives have various levels of abstraction and specificity and systems have evolved for describing the hierarchies of learning objectives (e.g., Fink's Taxonomy and Bloom's Taxonomy). An institution can decide wither they are interested in using taxonomies to manage the relationships between learning objectives.

Learning Objectives Categories

1. Since many learning objectives are short, free-form statements, categories provide a means for authors to provide more information about their learning objective such as accreditation categories, skill-based categories, subject-matter categories. These categories facilitate discovery of learning objectives but also enhanced reporting capabilities for the institution.

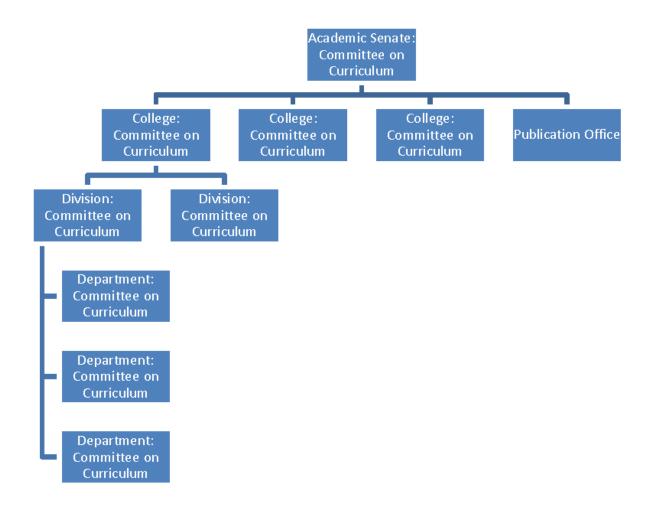
(CM 2.0) 6. Organization, People and Roles Management

The organizational structure of the institution and the specific people and their roles within that organization, are the keys to defining the workflow processes through which course and program changes are routed. KS Curriculum Management uses Kuali Identity Management (KIM) and Kuali Enterprise Workflow (KEW) to determine who can propose, review, modify and approve courses and programs. These responsibilities are not tied directly to individuals, but rather to roles that individuals occupy in the organization.

For example, if a new course is proposed for the Biological Sciences department, KS Curriculum Management determines the approval path for that course based on what it knows about the organizational structure. The first step may require review and approval by the Chair of the Biological Sciences department's Committee on Curriculum Once approved, the proposal moves on to the institution's Committee on Curriculum. KS Curriculum Management determines the current members and chair of the committee and presents the proposal to them for review, comment or approval. After the appropriate approvals have been obtained, KS Curriculum Management determines the next step is to present the proposal to the Publication Office for final approval.

As peoples' roles change, KS Curriculum Management will be able to react to these changes and route the proposal to the appropriate people. For example, if a member of the Committee on Curriculum is replaced with a new member, KS Curriculum Management will present proposals to the new member instead. By keeping the organizational structure, people and roles current, an institution can ensure that course proposals are routed to the appropriate people.

You can configure KIM and KEW to match your institution's specific needs. Without modification, KS Curriculum Management assumes the following organizational structure and roles for managing workflow.



(CM 2.0) 7. Reference Implementation Configuration

- (CM 2.0) Field Requiredness by Workflow Node Configuration
- (CM 2.0) Organization Configuration
- (CM 2.0) Subject Areas and Curriculum Org Relationship Configuration
- (CM 2.0) User Configuration
- (CM 2.0) Workflow Configuration and Associated Users

(CM 2.0) Field Requiredness by Workflow Node Configuration

Create and Modify Course (Non-Admin) Proposal Fields and Requiredness

UI Section	UI Field	Required for Proposal State	Required for Workflow Node
Course Info	Proposal Title	Saved	n/a
Course Info	Course Title	Saved	n/a
Course Info	Transcript Course Title	Enroute	College
Course Info	Subject Code	Enroute	Proposer
Course Info	Course Number	Enroute	Division
Course Info	Cross Listed		
Course Info	Jointly Offered		

Course Info	Version Codes		
Course Info	Instructor(s)		
Course Info	Description	Enroute	Proposer
Course Info	Proposal Rationale	Enroute	Proposer
Governance	Campus Locations	Enroute	Senate
Governance	Curriculum Oversight	Enroute	Proposer
Governance	Admin Org		
Course Logistics	Term		
Course Logistics	Duration Type		
Course Logistics	Duration Count		
Course Logistics	Assessment Scale	Enroute	Proposer
Course Logistics	Audit		
Course Logistics	Pass Fail Transcript Grade		
Course Logistics	Final Exam Status	Enroute	Proposer
Course Logistics	Final Exam Rationale	Only if Final Exam Status is Alternate or No Final Exam	Whoever picks Alternate of No Final Exam for Final Exam Status
Course Logistics	Outcome :: Type	Enroute	Proposer
Course Logistics	Outcome :: Value(s)	Enroute	Proposer
Course Logistics	Format :: Activity Type	Enroute	Department
Course Logistics	Format :: Contact Hours		
Course Logistics	Format :: Frequency		
Course Logistics	Format :: Duration Type		
Course Logistics	Format :: Duration Count		
Course Logistics	Format :: Anticipated Class Size		
Learning Objectives	LO Description		
Learning Objectives	LO Category		
Course Requisites	Student Eligbility + Prerequisite		
Course Requisites	Corequisite		
Course Requisites	Recommended Preparation		
Course Requisites	Antirequisite		
Course Requisites	Courses that Restrict Credit		
Course Requisites	Repeatable for Credit		
Active Dates	Start Term	Enroute	Proposer
Active Dates	Pilot Course		
Active Dates	End Term	Only if Pilot Course is checked	Whoever checks Pilot Course
Active Dates	End Term for Old Version (when modifying a course)	Enroute	Publication Office
Financials	Justification of Fees	Only with Fees present	Whoever adds Fees
Financials	Fees: Fee Type		

Financials	Fees: Rate Type	
Financials	Fees: Amount	
Financials	Revenue :: Source	
Financials	Revenue :: Percentage	
Financials	Expenditures :: Expending Org	
Financials	Expenditures :: Percentage	
Authors & Collaborators	n/a	
Supporting Documents	n/a	

Modify Program Proposal Fields and Requiredness

UI Section	UI Field	MAJOR Required for Proposal State	MAJOR Required for Workflow Node	SPECIALIZATION Required for Proposal State	SPECIALIZATION Required for Workflow Node
Proposal Information	Proposal Title	Saved	n/a	n/a	n/a
	Type of Modification	Enroute	Proposer	n/a	n/a
	Proposal Abstract			n/a	n/a
	Proposal Rationale	Enroute	Proposer	n/a	n/a
Change Impact	Related Course Changes			n/a	n/a
	Impacted Units			n/a	n/a
	Impacted Articulation or Transfer Programs			n/a	n/a
	Student Transition Plans			n/a	n/a
Key Program Info	Institution				
	Credential Program				
	Level				
	Code	Enroute	Publication Office	Enroute	Publication Office
	Classification	Saved	n/a	Saved	n/a
	Degree Type	Enroute	Proposer	Enroute	Proposer
	Title Full	Saved	n/a	Saved	n/a
	Title Short	Enroute	Publication Office	Enroute	Publication Office
	Title Transcript	Enroute	Publication Office	Enroute	Publication Office
	Title Diploma	Enroute	Publication Office	Enroute	Publication Office
	Start Term	Enroute	Proposer	Enroute	Proposer
	End Inst Admit Term				
	End Program Entry Term				
	End Program Enroll Term				
	Location	Enroute	Proposer	Enroute	Proposer

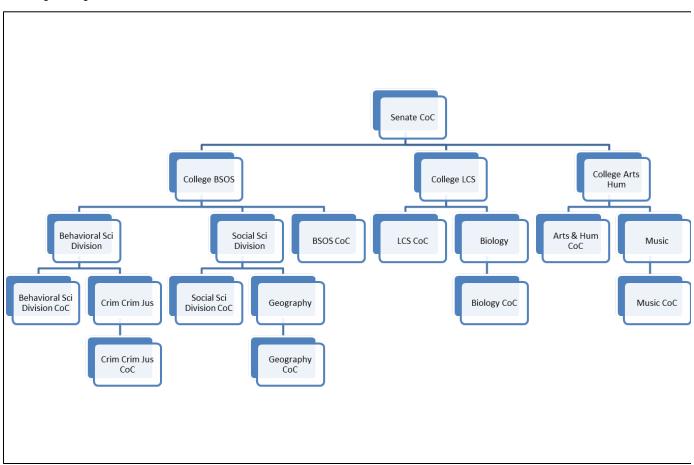
	CIP 2000				
	CIP 2010	Enroute	System Office	Enroute	System Office
	HEGIS	Enroute	System Office	Enroute	System Office
Program Managing Bodies	Curriculum Oversight Unit	Enroute	Proposer	Enroute	Proposer
	Curriculum Oversight Division	Enroute	Proposer	Enroute	Proposer
	Student Oversight Unit	Enroute	Department	Enroute	Department
	Student Oversight Division	Enroute	Department	Enroute	Department
	Deployment Unit	Enroute	Department	Enroute	Department
	Deployment Division	Enroute	Department	Enroute	Department
	Financial Resources Unit	Enroute	College	Enroute	College
	Financial Resources Division	Enroute	College	Enroute	College
	Financial Control Unit	Enroute	College	Enroute	College
	Financial Control Division	Enroute	College	Enroute	College
Specializations	Completion required?				
Description and Catalog Information	Program Description	Enroute	Proposer		
	Catalog Description				
	Core Faculty Members				
	Publication Targets	Enroute	Publication Office	Enroute	Publication Office
	Full Time/Part Time				
	Duration				
	Duration Count				
	Duration Notes				
	More info				
Program Requirements	Entrance Requirements				
	Satisfactory Progress Requirements				
	Completion Requirements				
Learning Objectives	LO text	Enroute	Proposer		
	LO category				
Supporting Documents	File Name				

	Description				
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(CM 2.0) Organization Configuration

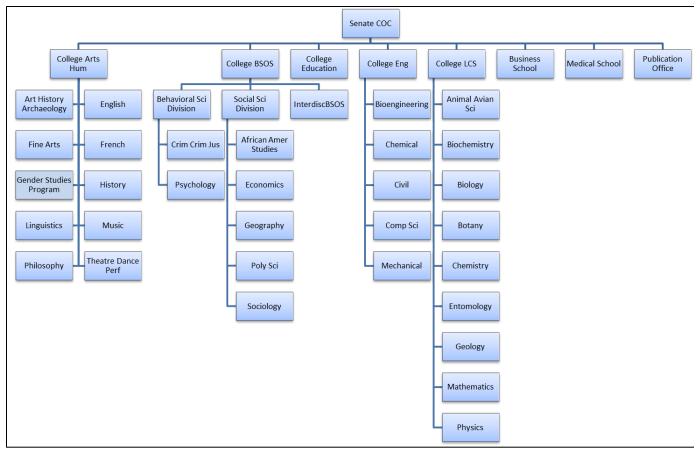
Curriculum Hierarchy for Organizations Configured for Workflow

Only certain organizations have been fully configured with all of the users and organizational relationships required to support workflow routing. The curriculum hierarchy uses "curriculum parent" and "curriculum child" relationship types. The following chart depicts the relationships among the configured organizations.



Full Curriculum Hierarchy

The following chart depicts the curriculum hierarchy from the Senate Committee on Curriculum (CoC) down through the colleges, divisions (where applicable) and departments. Every college, division, and department has a curriculum committee; however, these committees are not depicted on the chart.



(CM 2.0) Subject Areas and Curriculum Org Relationship Configuration

Subject Area Code	Subject Area Name	Org Relation Type (1)	Organization(s)
AASP	African American Studies	All	African American Studies Dept
AAST	Asian American Studies	All	College of Behavioral and Social Sciences
ACCT	Accounting	All	Business School
ANSC	Animal Science	All	Animal and Avian Science Dept
ARHU	Arts and Humanities	All	College of Arts and Humanities
ARTS	Fine Arts	All	Fine Arts Dept
ВСНМ	Biochemistry	All	Biochemistry Dept
BEES	Behavior, Ecology, Evolution and Systematics	All	Biology Dept
BENG	Biomedical Engineering	All	College of Life and Chemical Sciences College of Engineering
BIOE	Bioengineering	All	Bioengineering Dept
BIOM	Biometrics	All	Biology Dept
BMGT	Business Management	All	Business School
ВОТА	Botany	All	Botany Dept
BSCI	Biological Sciences	All	Biology Dept
CBMG	Cell Biology and Molecular Genetics	All	Biology Dept

CCJS	Criminal Justice	All	Criminology and Criminal Justice Dept
CHEE	Chemical Engineering	All	Chemical Engineering Dept
CHEM	Chemistry	All	Chemistry Dept
CIVI	Civil Engineering	All	Civil Engineering Dept
CSCI	CompSci	All	Computer Science Dept
ECON	Economics	All	Economics Dept
EDUC	Education	All	College of Education
ENGL	English	All	English Dept
ENTM	Entomology	All	Entomology Dept
FINA	Finance	All	Finance Dept
FREN	French	All	French Dept
GEMS	Gemstone	All	College of Behavioral and Social Science Office of Undergraduate Studies
GEOG	Geography	All	Geography Dept
GEOL	Geology	All	Geology Dept
GVPT	Government	All	Political Science Dept
HIST	History	All	History Dept
HONR	Honors	One	College of Arts and Humanities Office of Undergraduate Studies
INTB	International Business	All	Business School
LING	Linguistics	All	Linguistics Dept
MARK	Marketing	All	Business School
MATH	Math	All	Mathematics Dept
MEES	Marine-Estuarine-Environmental Sciences	All	Biology Dept
MENG	Mechanical Engineering	All	Mechanical Engineering Dept
MOCB	Molecular and Cellular Biology	All	Biology Dept
MUED	Music Education	All	Music Dept
MUET	Ethnomusicology	All	Music Dept
MUSC	Music	All	Music Dept
MUSP	Music Performance	All	Music Dept
NACS	Neuroscience and Cognitive Science	One	Biology Dept Psychology Dept
PHIL	Philosophy	All	Philosophy Dept
PHYS	Physics	All	Physics Dept
POLI	Political Science	All	Political Science Dept
PSYC	Psychology	All	Psychology Dept
PUAD	Public Administration	All	Political Science Dept
ROBT	Robotics	All	Mechanical Engineering Dept

SOCY	Sociology	All	Sociology Dept
SOWK	Social Work	All	Sociology Dept
STAT	Statistics	All	Mathematics Dept
THET	Theatre	All	Theatre, Dance, and Performance Arts Dept
UNIV	University Studies	One	Undergraduate Studies College of Arts and Humanities College of Behavioral and Social Science

Notes:

(1) Org Relation Type: When a particular subject code is used in a course proposal, the application will enforce that either **one** or **all** of the organizations listed must be included as values in the Curriculum Org field.

(CM 2.0) User Configuration

User Category Descriptions

- · Generic user
 - · Can generate create and modify course proposals
 - Can generate modify program proposals
 - Can search for course and program proposals
 - Can search, browse, and view approved courses and programs, as well as course/program version history
 - Can copy existing courses and course proposals to a new course proposal
 - Can manage course sets and learning objective categories
 - Can generate dependency analyses
- Faculty/staff user
 - Can perform generic user functions indicated above
 - · Can view course and program proposals that have been cancelled, withdrawn, rejected, or approved
- Admin user
 - Can perform generic and faculty/staff user functions indicated above
 - Can use administrator screens to create, modify, and retire courses
 - · Can use administrator screens to create and modify programs
 - Can modify existing versions of courses and programs
- · Workflow user :: In addition to belonging to one of the three previous categories, a user can be a workflow user.
 - Can review or approve course and program proposals for his/her organization, as detailed on Workflow Configuration and Associated Users
 - · Can view course and program proposals that are submitted to workflow, if the user is part of the proposal's workflow

Users

Username	User Category	Workflow User?
admin	Faculty/Staff	No
admin1	Generic	No
admin2	Generic	No
dev1	Generic	Yes
dev2	Generic	Yes
director	Generic	No
doug	Generic	No
earl	Generic	No
edna	Generic	No
employee	Generic	No
eric	Generic	No
erin	Generic	No

fran	Faculty/Staff	No
frank	Faculty/Staff	No
fred	Faculty/Staff	No
idm1	Generic	No
idm2	Generic	No
idm 3	Generic	No
1	Generic	No
5	Generic	No
kuluser	Generic	No
newaccountuser	Generic	No
notsys	Generic	No
notsysadm	Generic	No
quickstart	Generic	No
supervisor	Generic	No
test1	Generic	Yes
test2	Generic	Yes
testadmin1	Generic	No
testadmin2	Generic	No
testuser1	Generic	Yes
testuser10	Faculty	Yes
testuser2	Generic	Yes
testuser3	Generic	Yes
testuser4	Generic	Yes
testuser5	Generic	Yes
testuser6	Generic	Yes
testuser7	Faculty/Staff	Yes
testuser8	Faculty/Staff	Yes
testuser9	Faculty/Staff	Yes
user1	Generic	Yes
user2	Generic	Yes
user3	Generic	Yes
user4	Generic	Yes
user5	Faculty/Staff	Yes
user6	Faculty/Staff	Yes
user7	Faculty/Staff	Yes
user8	Faculty/Staff	Yes

(CM 2.0) Workflow Configuration and Associated Users

- Create Course WorkflowModify Course Workflow

Modify Program Workflow

Create Course Workflow

Dept Name	Subject Area(s)	Department Review	Division Review	College Review	Senate Review	Publication Review
Biology	BEES BSCI CBMG MEES MOCB NACS	Biology Dept COC Chair: User One (user1) Member: User Two (user2)	N/A	College of Life & Chemical Sciences COC Chair: User Three (user3) Member: user4 user4 (user4)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Criminology & Criminal Justice	CCJS	Criminology & Criminal Justice Dept COC Chair: Test User 7 (testuser7) Member: Test User 8 (testuser8)	Behavioral Science Division COC Chair: Test User 9 (testuser9) Member: Test User 10 (testuser10)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Geography	GEOG	Geography Dept COC Chair: Test User 1 (testuser1) Member: Test User 2 (testuser2)	Social Science Division COC Chair: Test User 3 (testuser3) Member: Test User 4 (testuser4)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Music	MUED MUET MUSC MUSP	Music Dept COC Chair: User Five (user5) Member: User Six (user6)	N/A	College of Arts & Humanities COC Chair: User Seven (user7) Member: User Eight (user8)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)

Modify Course Workflow

Dept Name	Subject Area(s)	Document Organizatio n Review	Publication Decision Review	Department Review	Division Review	College Review	Senate Review	Publication Review
Biology	BEES BSCI CBMG MEES MOCB NACS	Biology Dept COC Chair: User One (user1) Member: User Two (user2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)	Biology Dept COC Chair: User One (user1) Member: User Two (user2)	N/A	College of Life & Chemical Sciences COC Chair: User Three (user3) Member: user4 user4 (user4)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)

Criminology & Criminal Justice	CCJS	Criminolog y & Criminal Justice Dept COC Chair: Test User 7 (testuser7) Member: Test User 8 (testuser8)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)	Criminolog y & Criminal Justice Dept COC Chair: Test User 7 (testuser7) Member: Test User 8 (testuser8)	Behavioral Science Division COC Chair: Test User 9 (testuser9) Member: Test User 10 (testuser10)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Geography	GEOG	Geography Dept COC Chair: Test User 1 (testuser1) Member: Test User 2 (testuser2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)	Geography Dept COC Chair: Test User 1 (testuser1) Member: Test User 2 (testuser2)	Social Science Division COC Chair: Test User 3 (testuser3) Member: Test User 4 (testuser4)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Music	MUED MUET MUSC MUSP	Music Dept COC Chair: User Five (user5) Member: User Six (user6)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)	Music Dept COC Chair: User Five (user5) Member: User Six (user6)	N/A	College of Arts & Humanities COC Chair: User Seven (user7) Member: User Eight (user8)	Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)

Modify Program Workflow

Dept Name	Reference Majors	Department Review	Division Review	College Review	Senate Review	President's Office Review	System Office Review	Publication Review
Biology Dept	BISI BSCI	Biology Dept COC Chair: User One (user1) Member: User Two (user2)	N/A	College of Life & Chemical Sciences COC Chair: User Three (user3) Member: user4 user4 (user4)	1. Senate Curriculum Manager Curriculum Admin: Developer Two (dev2) 2. Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)

Criminology & Criminal Justice Dept	CCJS CRJM	Criminolog y & Criminal Justice Dept COC Chair: Test User 7 (testuser7) Member: Test User 8 (testuser8)	Behavioral Science Division COC Chair: Test User 9 (testuser9) Member: Test User 10 (testuser10)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	1. Senate Curriculum Manager Curriculum Admin: Developer Two (dev2) 2. Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Geography Dept	GEOG GRPH	Geography Dept COC Chair: Test User 1 (testuser1) Member: Test User 2 (testuser2)	Social Science Division COC Chair: Test User 3 (testuser3) Member: Test User 4 (testuser4)	College of Behavioral & Social Science COC Chair: Test User 5 (testuser5) Member: Test User 6 (testuser6)	1. Senate Curriculum Manager Curriculum Admin: Developer Two (dev2) 2. Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)
Music Dept	MUSP	Music Dept COC Chair: User Five (user5) Member: User Six (user6)	N/A	College of Arts & Humanities COC Chair: User Seven (user7) Member: User Eight (user8)	1. Senate Curriculum Manager Curriculum Admin: Developer Two (dev2) 2. Senate COC Chair: Tester One (test1) Member: Tester Two (test2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Senate Curriculum Manager Curriculum Admin: Developer Two (dev2)	Publication Office Chair: Developer One (dev1) Member: Developer Two (dev2)

(CM 2.0) 8. Course and Proposal States

This document clarifies Course States, Proposal States and Workflow Status, and their relationships and definitions. **WORKFLOW STATES:** Workflow Status is defined by KEW and not under the purview of KS to change.

Workflow Status	Description	Proposal States
Saved	document has been created by author prior to routing	Saved
Enroute	document is being routed	Enroute

Processed	document has received all required Approvals	Approved
Final	document has received all required Approvals and has all Acknowledgments cleared; proceed to post-processing	Approved
Disapproved	document has been Disapproved by reviewer; routing stops	Rejected (by Reviewer), Cancelled (by Initiator), Withdrawn (by Initiator)
Exception	issue/problem with routing; document requires intervention by Exception User/Workgroup	Exception

PROPOSAL STATES: Proposal states *are* under the purview of KS and, to the extent possible, are aligned with workflow status.

Proposal States	Description	State set when:	Workflow Status(es)
Saved	the proposal has been saved but not routed	the proposal is first Saved by the initiator	Saved
Cancelled	the proposal has been saved, but the initiator wants to cancel the proposal instead of submitting	the proposal is Cancelled by the initiator	Disapproved (by Initiator)
Enroute	the proposal is being routed	the proposal is Submitted to workflow	Enroute
Withdrawn	the proposal has been withdrawn by initiator prior to final approval	the enroute proposal is Withdrawn by the initiator	Disapproved (by Initiator)
Approved	the proposal has received all required Approvals	the last reviewer the on Route Log with an Approve Action Request approves the proposal	Processed, Final

Rejected	the proposal has been rejected	a reviewer on the Route Log with an Approve Action Request disapproves the proposal	Disapproved
Exception	there is an issue with the routing	routing fails	Exception

COURSE STATES:

The following is a summary of changes (and brief rationale) implemented in R1.2. (Leaving this section intact for 2.0 documentation, providing context for institutions that might find it useful.)

- Change business meaning of Approved, Active, and Retired course states.
- Create course state 'Not Approved.' Currently, proposals that are cancelled, rejected, or withdrawn sit in a state of 'Submitted.' This change would help the user make better sense of what happened to such proposals when viewing course version history.
- Deprecate course state 'Submitted.' All courses will be 'Draft' until they become 'Not Approved' or 'Approved.' Determination of field requiredness would become based on proposal states.
- Rename course state 'Inactive' to 'Suspended.' This more accurately describes to the user what happened to the course, and matches
 program states.
- Create course state grouping 'Latest States.' As implemented in program, 'latest states' reflects the ONE version that is either active, suspended, or retired. We can then limit actions or system behaviors to be based on latest states, i.e. which courses appear in search results.
- Implement the following constraints on course states. These match constraints on program states.
 - Only one DRAFT at a time. This will disallow course modification when a version with courseState = Draft already exists.
 - Only one of the following at a time (Active, Suspended, Retired)
 - OK to have multiple versions that are Superseded

Implementing the above changes then positions us to address the following changes to functionality:

- Change field requiredness for course proposals to be based on proposal states of Saved and Enroute. Make appropriate changes to requiredness indicators in UI.
- Within field requiredness for proposalState = Enroute, introduce requiredness by workflow node. Make appropriate changes to requiredness indicators in UI.

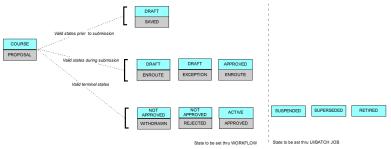
The future and current states and their definitions are given below:

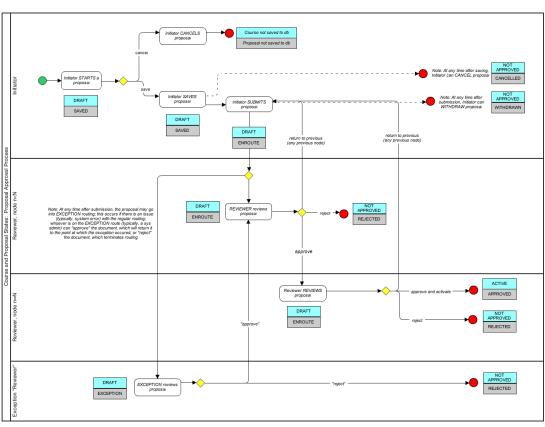
Course States	Description	State change expected when:	Allowed Actions	Valid Next States	Description	State change expected when:	Allowed Actions
Draft	course is in the process of being proposed/crea ted	course proposal is saved OR course is entered into system via screen(s)	Initiator: Cancel Submit Withdraw Copy to New Proposal Reviewer: Approve Reject Return to Previous Node Blanket Approve Admin: Modify without Version (to be implemented for admin screens only)	Not Approved Active	course proposal has been started and saved	course proposal is saved	Cancel Submit Withdraw

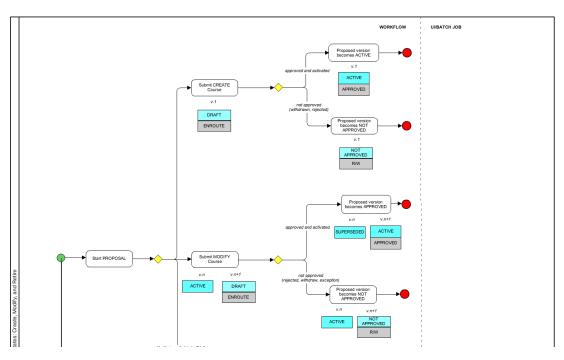
Not Approved	course creatio n or modification was not approved	course proposal cancelled or withdrawn by initiator OR rejected by reviewer.	Copy to New Proposal	None	N/A (did not exist)	N/A (did not exist)	N/A (did not exist)
Approved	course has been approved (i.e. completed curriculum review business process)	R1.2 reference implementatio n will not utilize Approved state. Courses will move directly from Draft to Active. An implementing institution could have a two-step process in which courses are first Approved, then Active.	R1.2 reference implementatio n will not utilize Approved state	R1.2 reference implementatio n will not utilize Approved state	course has been approved but is not eligible for offering, typically due to the lag between the approval process and the start term	course proposal has been approved or course is set to approved via screen(s)	Modify (only if latest version) Activate
Active	course has been prepared for offering (i.e. reviewed and updated by a curriculum administrator to ensure course data is consistent with institutional policies and practices)	course proposal has been approved at Publication Office node of reference workflow	Modify with Version Modify without Version (for admin screens only) Suspend Retire Copy to New Proposal	Draft Suspended Superseded Retired	course is eligible for offering	set via batch job when start term is effective OR set manually via screen(s)	Modify Inactive (not yet implemented) Retire (not yet implemented)
Suspended (was Inactive in R1.1)	course has been approved but is temporarily not eligible for offering	Suspended will not be implemented in R1.2	Activate Modify with Version Modify without Version (for admin screens only) Retire Copy to New Proposal	Active Draft Retired	same	set manually via screen(s)	Not yet implemented
Superseded	course has been superseded by newer version	set via batch job when newer version becomes active	Modify without Version (for admin screens only)	None	same	set via batch job when newer version becomes active OR set manually via screen(s)	None
Retired	course has been approved for retirement	retire course administrative action is approved Retire Course by proposal will not be implemented in R1.2	Modify with Version Modify without Version (for admin screens only) Copy to New Proposal	Draft	course has been retired and is no longer eligible for offering	retire course proposal is approved OR set manually via screen(s)	Not yet implemented

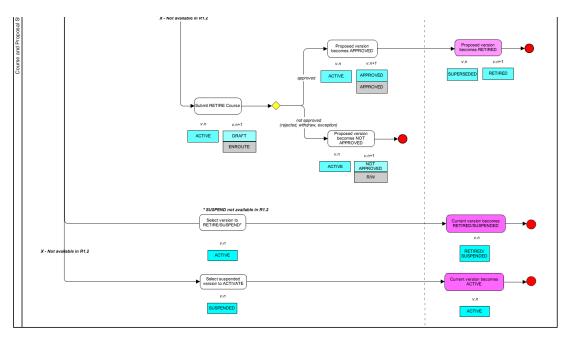
Catest States	Grouping of the latest states. Cannot have more than one version among these states: active, suspended, & retired. Default search result should include just these versions as well.				N/A (did not exist)	N/A (did not exist)	N/A (did not exist)
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The figure below show the when the various course and proposal states are valid, and when they are set through the proposal process. Figure has been updated to reflect R1.2 changes and has not changed for 2.0. See version 18 for what was implemented in R1.1.









Course and Proposal States

R1.2 Allowable Actions and Next States

Current Course State	Action	Next State of this Course Version for this Action
Draft	Cancel (before save)	N/A
	Cancel (after save)	Not Approved
	Submit	Draft (no state change)
	Withdraw	Not Approved
	Approve (at last node)	Active
	Reject (at any node)	Not Approved
	Return to Previous Node	Draft (no state change)
	Blanket Approve	Approved
	Modify without Version	Draft (no state change)
	Copy to New Proposal	Draft (no state change)
Not Approved	Copy to New Proposal	Not Approved (no state change)
Approved	None; Approved will not be utilized as a state in R1.2 reference implementation	Active
Active	Modify with Version	New version: Draft Old version: Superseded, upon activation of subsequent version
	Modify without Version	Active (no state change)
	Suspend	Suspended
	Retire	Retired
	Copy to New Proposal	Active (no state change to "source" course)
Suspended	Activate	Active

	Modify with Version	New version: Draft Old version: Superseded, upon activation of subsequent version
	Modify without Version	Suspended (no state change)
	Retire	Retired
	Copy to New Proposal	Suspended (no state change)
Retired	Modify with Version	New version: Draft Old version: Superseded, upon activation of subsequent version
	Modify without Version	Retired (no state change)
	Copy to New Proposal	Retired (no state change)

From Norm's Types and States used by Courses page

name	desc	include	xmlObject	effective	expiration	status	comments
draft	Draft either public or private	TRUE	cluInfo	1/1/2010		Released	not sure if private/public applies to program?
draft.private	Exploratory/Pri vate scratch pad	FALSE	cluInfo	1/1/2010		Revisit	Transitioned to proosal state?
draft.public	Entered as draft but not yet submitted	FALSE	cluInfo	1/1/2010		Revisit	Transitioned to proosal state?
submitted	Submitted but not yet approved	FALSE	cluInfo	1/1/2010		Revisit	Transitioned to proosal state?
withdrawn	Withdrawn (anytime before activated)	FALSE	cluInfo	1/1/2010		Revisit	Transitioned to proosal state?
approved	Approved	FALSE	cluInfo	1/1/2010		Revisit	Transitioned to proosal state?
rejected	Not approved (rejected)	FALSE	cluInfo	1/1/2010		Revisit	Do we need here some indication of why it was not approved? I.e. disapproved vs. not acted on because submitted too late, etc.
active	Active ready to be used and published	TRUE	cluInfo	1/1/2010		Released	

superseded	Old version that has been replaced by a newer version. Students may be grandfathered into this program but new students must enroll in the new program	TRUE	cluInfo	1/1/2010	Released	When a new version of a program is approved the existing one needs to be marked as superseded.
latest states	Grouping of the latest states. Cannot have more than one version among these states: active, suspended, & retired. Default search result should include just these versions as well.	TRUE	cluInfo	1/1/2010	Grouping	
suspended	Temporarily removed, often done before terminated but not always. New students may not enroll but existing students already enrolled may continue depending on grandfathering rules	TRUE	cluInfo	1/1/2010	Released	
retired	Retired/No longer active. Terminated	TRUE	cluInfo	1/1/2010	Released	

Outstanding Issues

• We should consider taking draft and not approved versions out of course version history; they introduce confusion to the user because they are versions based on proposals. One implication of making this change is that there will be missing version numbers in the version list. An alternative might be to give the user the ability to show/hide draft and not approved versions. Be sure to consider potential implications for copy proposal from existing course/proposal.
Seems like a good idea to implement a filter on course version history, but will not be addressed in R1.2. Could look into a sequence number that may only increment on approved versions. **Leaving this information intact for 2.0 documentation to provide information for future use.