Course Mapping Camp: Empowering Faculty
Creativity for Learner-Centered Design
Resource Guide

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Canvas Site: https://ufl.instructure.com/courses/368831

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Terminology and Examples

Curriculum Mapping

- Program level
- Guides curriculum by demonstrating which course(s) will cover program outcomes for a degree.

Course Mapping

- Course level
- Instructor’s personal design for meeting course-level outcomes
- Demonstrates alignment between course goals, student learning objectives (SLOs), content, and assessments.

The Course Mapping Camp Process

Led by experienced instructional designers, Course Mapping Camp starts with your students’ outcomes, looking to the syllabus or course description for course goals before brainstorming or refining specific and measurable student learning objectives (SLOs). Next, you’ll group topics into broad themes to guide student learning and then select assessments, learning materials, and activities that support your outcomes. Throughout the process, camp instructors will provide guidance and feedback to ensure alignment between goals, objectives, and assessments and discuss approaches to scaffold student learning.

Learner-Centered Design

- Focuses on the students’ experience of the material
- Includes explicit goals and outcomes
- Organizes material to facilitate learning and presents material thematically
- Includes problem-based assessments
- Provides active learning assignments and activities
- Incorporates group problem solving
- Scaffolds using formative assessment
- Provides frequent feedback

Assessments

Any activity, quiz, exam, or assignment for which students are provided feedback that helps them to assess and learn from their work. A few examples of feedback are individual written comments, homework solutions, exemplar responses to case studies, and completed assignment rubrics. As long as feedback is provided, any activity is considered an assessment, regardless of whether or not it is graded.

Content

Any reading, video, lecture, supplementary material, or ungraded or unsubmitted activity meant to introduce course material to students.

Further Reading

To learn more, visit the Course Mapping Camp Canvas page for a list of references.
Program Outcomes, Course Goals, and Student Learning Objectives

Program Outcomes
- Broad
- Assessed across multiple courses at multiple learning levels

Course Goals
Subset of Program Outcomes
- Broad
- Assessed at level appropriate for the course

Learning Objectives
Align with Course Goal(s)
- Course specific
- Measurable and specific
- Assessed within module or unit, align with one or more course goal

Learning Domains: Knowledge, Skills, and Values

Knowledge
(understanding of course-specific information)
- Understand basic principles
- Learn about practical applications
- Practice integration with other topics
- Examine the history of topic

Skills
(ability to perform a task)
- Develop time management skills
- Develop oral and written communication skills
- Make a goal-setting plan
- Cultivate critical thinking among peers
- Develop conflict resolution skills
- Expand problem solving skills
- Evaluate sources of information for reliability

Values and Attitudes
(internal drivers of behavior)
- Build work ethic
- Develop cooperative attitude
- Exhibit reliability and responsibility
- Be respectful of diversity
- Develop leadership skills
- Create a practice of self-motivation
- Become a lifelong learner
- Demonstrate persistence
- Practice professionalism

Student Learning Objectives (SLOs)

<table>
<thead>
<tr>
<th>Course Goal Examples</th>
<th>Learning Objective Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand the system of stars in the Milky Way.</td>
<td>Calculate the distance between stars using spherical coordinates.</td>
</tr>
<tr>
<td>Learn about the significance of the Obama Administration.</td>
<td>Evaluate three pieces of legislation President Obama supported that have impacted the LGBT community.</td>
</tr>
<tr>
<td>Understand elements of creative writing.</td>
<td>Compare the narrative viewpoint and narrative voice in <em>To Kill a Mockingbird</em> and <em>Go Set a Watchman</em>.</td>
</tr>
</tbody>
</table>
Alignment
Content, assessments, and student learning objectives must all work together to prepare students to achieve their course goals (and ultimately, their degree program goals).

Activities and experiences that support students in reaching the intended SLOs and succeeding at assessments.

What students will be able to do.

How students demonstrate whether they have completed the SLO and where they receive feedback on their performance.

Taxonomies of Learning
Some tasks require greater understanding of the content than others. When planning student learning objectives, it is helpful to think about how challenging each one is. Students should demonstrate learning at varying levels of these taxonomies.
### Knowledge

**Action Words for the Cognitive Domain in Bloom’s Taxonomy**

<table>
<thead>
<tr>
<th>LOWER-ORDER THINKING SKILLS</th>
<th>HIGHER-ORDER THINKING SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remembering</strong></td>
<td><strong>Evaluating</strong></td>
</tr>
<tr>
<td>Recall specific facts.</td>
<td>Create or develop something new.</td>
</tr>
<tr>
<td><strong>Understanding</strong></td>
<td></td>
</tr>
<tr>
<td>Grasp meaning of materials.</td>
<td></td>
</tr>
<tr>
<td><strong>Applying</strong></td>
<td></td>
</tr>
<tr>
<td>Use information in a new situation.</td>
<td></td>
</tr>
<tr>
<td><strong>Analyzing</strong></td>
<td></td>
</tr>
<tr>
<td>Identify schemas or relationships.</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluating</strong></td>
<td></td>
</tr>
<tr>
<td>Use information to make judgments.</td>
<td></td>
</tr>
<tr>
<td><strong>Creating</strong></td>
<td></td>
</tr>
</tbody>
</table>

- **Define**
- **Describe**
- **Examine**
- **Identify**
- **Label**
- **List**
- **Locate**
- **Match**
- **Memorize**
- **Recall**
- **Recite**
- **Recognize**
- **Record**
- **Reproduce**
- **Retell**
- **Select**
- **State**
- **Tabulate**
- **Tell**
- **Visualize**
- **Associate**
- **Classify**
- **Compare**
- **Contrast**
- **Convert**
- **Describe**
- **Distinguish**
- **Explain**
- **Illustrate**
- **Interpret**
- **Order**
- **Predict**
- **Relate**
- **Report**
- **Represent**
- **Restate**
- **Select**
- **Summarize**
- **Trace**
- **Transform**
- **Translate**
- **Apply**
- **Articulate**
- **Calculate**
- **Change**
- **Chart**
- **Compute**
- **Construct**
- **Develop**
- **Employ**
- **Examine**
- **Experiment**
- **Explain**
- **Illustrate**
- **Interpret**
- **Manipulate**
- **Modify**
- **Operate**
- **Predict**
- **Produce**
- **Relate**
- **Solve**
- **Transfer**
- **Analyze**
- **Categorize**
- **Compare**
- **Connect**
- **Contrast**
- **Criticize**
- **Deduce**
- **Diagnose**
- **Differentiate**
- **Discriminate**
- **Dissect**
- **Estimate**
- **Evaluate**
- **Experiment**
- **Infer**
- **Organize**
- **Plan**
- **Prioritize**
- **Question**
- **Separate**
- **Survey**
- **Test**
- **Appraise**
- **Argue**
- **Assess**
- **Choose**
- **Convince**
- **Criticize**
- **Debate**
- **Defend**
- **Editorialize**
- **Estimate**
- **Evaluate**
- **Grade**
- **Judge**
- **Justify**
- **Measure**
- **Persuade**
- **Predict**
- **Rank**
- **Referee**
- **Summarize**
- **Support**
- **Validate**
- **Adapt**
- **Assemble**
- **Compose**
- **Construct**
- **Create**
- **Design**
- **Develop**
- **Facilitate**
- **Hypothesize**
- **Integrate**
- **Invent**
- **Modify**
- **Negotiate**
- **Plan**
- **Propose**
- **Revise**
- **Role-play**
- **Schematize**
- **Simulate**
- **Specify**
- **Support**
- **Validate**


### Skills

**Action Words for the Psychomotor Domain in Bloom’s Taxonomy**

<table>
<thead>
<tr>
<th>LOWER-ORDER THINKING SKILLS</th>
<th>HIGHER-ORDER THINKING SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imitation</strong></td>
<td><strong>Naturalization</strong></td>
</tr>
<tr>
<td>Observe skill and repeat it in without a high degree of control.</td>
<td>Perform skill in an automatic, intuitive, or unconscious way with little physical or mental exertion.</td>
</tr>
<tr>
<td><strong>Manipulation</strong></td>
<td></td>
</tr>
<tr>
<td>Perform skill imperfectly from written or verbal instructions.</td>
<td></td>
</tr>
<tr>
<td><strong>Precision</strong></td>
<td></td>
</tr>
<tr>
<td>Refines the skills accuracy and precision without assistance.</td>
<td></td>
</tr>
<tr>
<td><strong>Articulation</strong></td>
<td></td>
</tr>
<tr>
<td>Perform skill expertly and develop methods to modify it for new problems or situations.</td>
<td></td>
</tr>
<tr>
<td><strong>Naturalization</strong></td>
<td></td>
</tr>
<tr>
<td>Perform skill in an automatic, intuitive, or unconscious way with little physical or mental exertion.</td>
<td></td>
</tr>
</tbody>
</table>

- **Copy**
- **Duplicate**
- **Follow**
- **Imitate**
- **Repeat**
- **Replicate**
- **Try**
- **Build**
- **Improve efficiency**
- **Manipulate**
- **Under-supervision**
- **Practice**
- **Re-create**
- **Calibrate**
- **Complete**
- **Control**
- **Demonstrate**
- **Perfect**
- **Perform**
- **Show**
- **Adapt**
- **Combine**
- **Construct**
- **Control**
- **Coordinate**
- **Integrate**
- **Master**
- **Modify**
- **Solve**
- **Act habitually**
- **Adapt**
- **Direct**
- **Excel**
- **Guide**
- **Integrate**
- **Manage**
- **Perfect**
- **Perform automatically**
- **Solve**


Ibrahim, A. and Iqbal, J. Affective and psychomotor domains of Bloom’s Taxonomy. Available at slideshare.net.
### Values

**Action Words for the Affective Domain in Bloom’s Taxonomy**

<table>
<thead>
<tr>
<th>LOWER-ORDER THINKING SKILLS</th>
<th>HIGHER-ORDER THINKING SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receiving</strong></td>
<td><strong>Organizing &amp; Conceptualizing</strong></td>
</tr>
<tr>
<td>Selectively attends to stimuli.</td>
<td></td>
</tr>
<tr>
<td><strong>Responding</strong></td>
<td><strong>Internalizing</strong></td>
</tr>
<tr>
<td>Responds to stimuli.</td>
<td></td>
</tr>
<tr>
<td><strong>Valuing</strong></td>
<td></td>
</tr>
<tr>
<td>Attaches value to something.</td>
<td></td>
</tr>
<tr>
<td><strong>Organizing &amp; Conceptualizing</strong></td>
<td></td>
</tr>
<tr>
<td>Conceptualizes the value and resolves conflict between it and other values.</td>
<td></td>
</tr>
<tr>
<td><strong>Internalizing</strong></td>
<td></td>
</tr>
<tr>
<td>Integrates the value into a system that controls behavior.</td>
<td></td>
</tr>
</tbody>
</table>

- accept
- acknowledge
- be aware
- listen
- notice
- pay attention
- tolerate
- agree to
- answer freely
- care for
- communicate
- conform
- consent
- contribute
- cooperate
- follow
- respond
- visit
- volunteer
- adopt
- adjust
- arrange
- balance
- classify
- conceptualize
- formulate
- group
- organize
- rank
- theorize
- adapt
- adjust
- arrange
- balance
- classify
- conceptualize
- formulate
- group
- organize
- rank
- theorize
- act upon
- advocate
- defend
- exemplify
- influence
- justify behavior
- maintain
- serve
- support

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**After Camp**

**Implementation**

- Complete your workshop map
- Start small
- Practice continuous improvement
- Encourage collaborations among CMC alums
- Share relevant T&L resources and services

**Next Steps**

- Jot down any next steps/items left to complete
- You can find our presentation materials at the Educause ELI 2019 site: [https://events.educause.edu/eli/annual-meeting/2019/agenda/coursemapping-camp-empowering-faculty-creativity-for-learnercentered-design](https://events.educause.edu/eli/annual-meeting/2019/agenda/coursemapping-camp-empowering-faculty-creativity-for-learnercentered-design)
- Visit the public Course Mapping Camp Canvas site: [https://ufl.instructure.com/courses/368831](https://ufl.instructure.com/courses/368831)

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Example Module Outline

Module (insert number): Insert Title

Objectives:
- Insert Here
- Insert Here
- Insert Here

To Do List:
List of all items students must complete in this module. You can be as specific as you want here, or you can simply list the following:
- Complete all content shown below
- Complete module assessments shown below

Content:

Readings:
- Insert reading assignments here

Lecture(s):
List the topic of each lecture to be recorded/given
- Insert Lecture Title
- Insert Lecture Title
- Insert Lecture Title

Assessments
List the name/topic of each assessment (some examples follow)
- Work in groups on “Title of” case study
- Complete “Title of assignment” writing assignment
- Contribute to “Topic of discussion” discussion board
- Complete Module Quiz

Supplemental Content
Any readings or other materials that support the stated objectives but are not required.