2020-2021
Instructions for Session and Exam Mapping

Frequently Asked Questions:

What does “mapping” mean?

“Mapping” simply means categorizing what is being taught and tested across our curriculum, using standardized language. The standardized terminologies help make sure that when we look for where we teach or test something, we can find it reliably.

Why do I need to map, and what is done with this data?

Mapping our courses, events/sessions, and assessments to a defined set of terms provides data and consistency for:

- Reporting to LCME on where, when, and how often critical concepts are taught – LCME asks us to report on this as part of our accreditation process; good data is needed to accurately represent all of the important concepts our faculty are covering through their instruction and assessment
- Ensuring correspondence between what is taught and what is assessed
- Comparing curricular activities to student USMLE outcomes
- Informing curricular planning, including identifying overlap, gaps, and other areas for change

What do I need to do to map my course?

1. For each session, fill out the session-level curriculum entry form as best you can. This includes:
   1. Basic info on the name of the course,
   2. Primary and any secondary instruction methods, i.e., whether you used a flipped classroom approach (Use MedBiquitous instruction method terms, provided in your packet),
   3. Primary and any secondary assessment methods used (Use MedBiquitous assessment method terms, provided in your packet),
   4. types of resources used for teaching (Use MedBiquitous resource types terms, provided in your packet),
   5. learning objectives,
   6. content covered* (USMLE, Keyword, PLUS List), and
   7. depth of coverage, i.e., basic, intermediate, advanced (see definitions in the terms list at the end of this document).

Spend about 10 minutes on each session-level form – if it is taking longer, ask for help.

*For the content covered in each session (main topic and learning objectives), decide on your preferred approach to mapping your content. Decide whether you want to:

1. Provide the USMLE content terms for each session objective yourself – this requires the most time on your part, and for you to work directly with the USMLE content outline
2. Input simple keywords – a librarian will transform your keywords into the required USMLE terms, or
3. Provide all of your course materials, grouped and labeled according to each event/session, and a team will attempt to complete the mapping – this may require additional discussions with you and your review of the work

If you are not sure how you want to proceed and need someone to get you started – contact Aneida Skeens, Lorena Burton, or Rachel Walden to further discuss the process
2. **For each exam**, mapping of individual exam questions is needed. Contact Rachel Walden in the medical library for assistance mapping exam questions, as this requires use of the specific USMLE terms for each question. Exams also need to be captured with event/session forms.

**Can I get help mapping my course?**

YES. Help is available for session learning objectives via either:

- You provide the session level mapping forms, but provide **keywords** (to include PLUS List Topic coverage) for your session learning objectives and a librarian will match these to the correct USMLE Content Outline terms. This saves you the trouble of figuring out exactly which USMEL terms to use.

OR

- You provide the complete materials for your session – syllabus, slides, any other content assigned to students – and we will do our best to generate an initial set of session mapping forms. We may need to discuss with you or have you review along the way.

For exam question mapping, you can provide a copy of your exam questions to Rachel Walden, and the medical library will work to map the individual questions. Your questions will be kept confidential and secure.

**What counts as an event/session?**

An “event” or “session” is a complete, coherent unit of instruction. This is typically a single class session; examples include a didactic session, lab, group session, grand rounds, conference, clinical experience, or required review session.

**How specific should my keywords be? How many keywords should I have?**

*(this question applies to session mapping, not exams)*

They should be as specific as possible to clearly describe the point of the session. It may help to think of it as:

- If you were submitting a journal article and were asked to list keywords for your manuscript, you would give 3 to 5 terms to say what it is about. If your session were a journal article, what keywords would you give it?
- If a student or colleague asked you to sum up the session after the fact, what key concepts would you tell them it was about?

The critical point is for someone to understand what your session (such as your lecture) was about. What key concepts do you want students to carry with them from your session? If you were telling someone else what your session was about, what would you tell them?

Your “keywords” can also be short phrases. For example, it is likely better to say you were talking about “acid base and causes of imbalance” or “acid base calculations” than to say “metabolism” or “blood chemistry,” as the former gives us a much better idea of the key points you were trying to convey. Likewise, “how SNPs can lead to disease” may be more appropriate than “genetics.” This approach ensures we have useful specific data on what is being taught where.

Every “event” or “session” should have at least one associated USMLE, Keyword, PLUS List keyword or phrase.

**NOTE:** Please make sure when listing your USMLE, Keyword, PLUS List keyword or phrase to think about societal, ethical, cultural, research, interprofessionalism, care setting, and other broad and non-clinically-specific concepts that were critical to your learning objectives. We provide a copy of the “Plus List” terms alongside the session mapping forms as a reminder.
When should I do the mapping?

The best times to complete session mapping forms are:

- When you’re planning each session of your course for the year. You’re already thinking about your learning objectives, so this may be a good time to go ahead and complete the corresponding session-level form. Once you have completed your self-study and identified plans for changes to the course you will need to update those changes to your mapping.
- Immediately after each course session, when it’s fresh in your mind
- When you update your course, altering the educational objectives for a course session

What about sessions led by co-instructors or guest-lecturers?

We recommend having the instructor for the specific session complete the Session-Level Curriculum Entry Form either as they are planning or immediately after they deliver a session. If you cannot get your guest instructor to complete the form, please identify at minimum the event/session title, length and instructor for the session. Provide a contact number/email for the instructor so they can be contacted by Academic Affairs (Lorena) for further details of the session.

What vocabularies should I use for mapping?

- For session learning objectives, we use the USMLE Content Outline, available online at http://www.usmle.org/pdfs/usmlecontentoutline.pdf - if you wish to map the learning objectives for your course events yourself, you should use these terms. If you prefer to provide keywords for your learning objectives, we will map them to the USMLE Content Outline and use the most appropriate choices. We also use a pre-defined supplementary “Plus List” to accommodate terms not represented in the USMLE Content Outline to include LCME identified Standards and Element terms.
  - We also use these terms to map the content of specific exam questions.
- For instructional methods used, we use the MedBiquitous Curriculum Inventory. Terms and definitions are provided online at https://medbiq.org/curriculum/vocabularies.pdf

What’s in the “Plus List?”

The “Plus List” includes concepts that aren’t in the USMLE Content Outline. These tend to be terms on issues such as health disparities, socioeconomics, ethics, bias, diagnosis, and several societal issues of interest. This is provided as a separate document.

Please make sure when listing your keywords to think about societal, ethical, cultural, research, interprofessionalism, care setting, and other broad and non-clinically-specific concepts that were critical to your learning objectives. We provide a copy of the “Plus List” terms alongside the session mapping forms as a reminder.

Do I have to complete all the blanks under learning objectives for each event/session?

NO. That is just to give you room if you do have that many. You know your course best and what the key concepts are that you want students to walk away with, so list as many or as few objectives as are appropriate.

I’m having trouble with the session-level form aside from the course content terms, what do I do?

Get in touch with Aneida Skeens, Lorena Burton (Academic Affairs) or Rachel Walden (Medical Library) and we’ll talk you through it and figure out how we can make it easier for you.
Terms you may encounter on the form:

- **Assessment Methods** – these are selected from MedBiquitous and represent how student knowledge and skills were assessed, such as written exams, oral exams, national exams, OSCEs, participation, and peer assessment.

- **Course Objective** – these are your course objectives which tie back to the Institutional Educational Objectives (IEOs).

- **Depth of coverage** – refers to how deeply a concept is taught; choose from three categories, including:
  - Basic: students are expected to **remember/recall** basic concepts, recognize, define, label, or describe; corresponds to “Knowledge” in Bloom’s Taxonomy
  - Intermediate: students are expected to **understand** enough to discuss, explain, summarize, give examples; corresponds to “Comprehension” in Bloom’s Taxonomy
  - Advanced: students are expected apply, demonstrate, interpret, use, illustrate, can apply information in new situations; corresponds to “Application” in Bloom’s Taxonomy

- **Event** – used interchangeably with “session;” one discrete unit of your course, such as a single lecture or laboratory

- **Flipped classroom** – instructional format in which students are provided teaching materials (such as video lectures) PRIOR to in-class instruction; in-class time is then used for engagement in exercises, projects, and/or discussion. Includes out of class preparation and assessment as part of session hours.

- **Formative (assessment type)** – assessment used to check student understanding and inform further instruction, provides feedback that helps students and instructors identify and target areas needing further study; usually low stakes; examples: quick reflections, peer assessment, research proposals or EBM exercises submitted for feedback

- **Institutional Educational Objectives (IEOs)** – these are the College of Medicine objectives each course and clerkship will identify for coverage and are tied to course’s objectives and eventually each “event” or “session”.

- **Instructional Methods** – these are selected from MedBiquitous and represent instruction types like Laboratory, Journal Club, and Case-Based Learning. There may be multiple methods, but one will be primary for the session.

- **Event learning objective** – these are the educational objectives set for your course session and are tied back to your course objectives

- **Resource Types** – these are selected from MedBiquitous and represent types of resources used in your teaching, such as cadavers, audience response systems, mannequins, virtual patients, or other tools.

- **Session - Event** – used interchangeably with “event;” one discrete unit of your course, such as a single lecture or laboratory

- **Summative (assessment type)** – used to assess student content knowledge; usually high stakes and generally part of grade; examples: final exams, final projects, board or licensing exams

- **Threads** – MSEC identified specific content themes that may not have their own courses but are woven throughout the curriculum