



Learner-Centered Integrated Curriculum(LInC) Course and Clerkship Leadership Guide

Fall 2020

- The University of Massachusetts Medical School seeks to provide a learning environment that is as safe and supportive as possible, including during this pandemic
- The impact of the COVID-19 pandemic is complex and affects individuals in different ways
- Learners build competence through a blend of independent and group learning experiences using a variety of settings and modalities
- There is no way to guarantee zero risk of acquisition of SARS-CoV-2 during this pandemic, despite excellent infection control practices and supporting policies
- Accommodations processes and policies are in place to address personal medical circumstances that may impact a learner's ability to participate in the curriculum

Table of Contents

<u>Welcome!</u>	5
Attend the LinC Leadership Meetings	
Attendance at Curriculum Committee meetings	
Annual curriculum retreats and targeted course and clerkship leader mini-retreats	
Meetings with Department Chairs	
Faculty, Staff and Student Educator List	
Complete Your Course To-Do List.....	6
How to Prepare an Existing and New Course?	
Schedules and Academic Calendars	
Update and maintain course schedule	
Requests for FOM students advanced standing	
Update course schedule and content in Blackboard Learn	
OASIS Curriculum Database	
Update course components in OASIS curriculum database	
Review course components	
FOM1 and FOM2 outreach for teaching assistants	
Course Development	
FOM Preparation & Consolidation Time	
FOM Lecture Capture	
Best practices for course materials	
Accreditation standards	
Technology Lending Program	
Integrating Classroom Technology into the course	
Instructional Design and Information Services	
Development of Course Content in Blackboard	
Integrated Teaching and Learning Center (iTLC)	
<u>How to Prepare Your Exams?</u>	12
Exam Administration	
Exam/Assessment Structure	
Online Assessment Tools and Computer-Based Testing Efforts	

FOM 1 & 2

Pre & Post-exam reviews for students

Exams in courses with block structure

Additional non-scanned exam items

Missed Exams

Exam Scoring and Reporting

Uploading Student Exam Scores to Gradebook in PeopleSoft Database

Training Opportunities via IREA

What You Need to Know about Grading?..... 15

Key Student Affairs Policies and Definitions

Uploading Final Course Grades to PeopleSoft

Core Clinical Experiences (CCE) & Sub-internship Grades

Reporting Grades to Students

Determination and Changes to Grades

Remediation

Mentor Connections

Basic and Clinical Science Academic Evaluation Boards (BSAEB/CSAEB)

Appropriate treatment to learners

Receive Your Course Feedback and Review 18

Course Feedback Groups with Students

FOM1 & FOM2 Course Leader Meetings with Student Representatives

Internal Course Quality Improvement Annual Review

Periodic Course/Clerkship Review

Feedback to Faculty

Contact Your Educational Resources..... 19

Office of Undergraduate Medical Education (OUME)

Institutional Research, Evaluation, & Assessment (IREA)

Office of Student Affairs

Lamar Soutter Library

Academic Instructional Design & Technology

Welcome!

This Orientation and Reference guide is designed to provide basic information to you as course and clerkship leaders with links to more detailed resources. The creation of this guide has been a collaborative effort among the Offices of Undergraduate Medical Education (OUME), Institutional Research, Evaluation and Assessment (IREA) and Academic Instructional Design & Technology (AIDT). This leadership guide is organized by course and clerkship development topics.

Attend Your LInC Leadership Meetings

Attendance at Curriculum Committee monthly meetings : Meetings provide a venue for course and clerkship leaders, faculty, and staff to share ideas, problem-solve, receive faculty development, discuss policy, plan calendars, present, and provide peer review on course and clerkship reviews, learn of new initiatives, etc. See a listing of [curriculum committees](#). **Note:** *invitations are extended to all course co-leaders for each meeting and all are encouraged to attend, though responsibilities may be shared to ensure at least one course leader represents their team at each meeting.*

Annual UMMS EPC curriculum retreats, and targeted course and clerkship leaders mini-retreats (2-3 times per year): Retreats serve as a mechanism for deeper review of topics covered in curriculum committees and to work across courses, curriculum years, schools and disciplines; expectation is that course leaders will make every effort to attend. The next EPC retreat will be in January 2021.

Meetings with Department Chairs (annually): Course and clerkship co-leaders should meet with the chairs of the departments who sponsor their courses to review course evaluation reports, student feedback, faculty performance, course administration issues and plans for change in subsequent years. Chairs should be kept aware of course progress and issues throughout course delivery as necessary. In case of clerkships, Chairs should be apprised of both clerkship-specific and coordinated thematic section issues.

Faculty, Staff and Student Educator List: The OUME maintains a list of course and clerkship leaders, administrators and student leaders to facilitate communication and coordination. The **Educator's List** is available at this [link](#) on the OUME website in the dropdown for OUME.

Complete Your Course To-Do List

How to Prepare an Existing and New Course?

Schedules and Academic Calendars

Academic Curriculum Calendar: Creating the high-level curriculum schedule annually is the work of the EPC through its curriculum committees and drafts are formally submitted by their

LInc Course and Clerkship Leadership Guide

chairs. In creating the schedule, the Chairs of FOM1, FOM2, CCE and AS curriculum committees work in appropriate consultation across all four years with the offices of Student Affairs (Justine Ashley) and UME. Annual schedule development follows a list of guidelines related to holidays, exams, and other course considerations to decrease inter and intra-year schedule conflicts and to meet registrar and financial aid requirements. Calendars can also change to accommodate mutual requests by course leaders, or in support of curriculum change as recommended by the EPC or its curriculum committees. The responsibility for determination of calendar dates are available at: [Curriculum Dates and Planning Responsibilities](#) 2012. After finalization with the Offices of Undergraduate Medical Education and Student Affairs (OSA), the calendars must be sent to the Registrar and Financial Aid Offices for confirmation and posting. [Academic calendars](#) are posted on the Office of Student Affairs (OSA) website. Contacts: Justine Ashley (OSA), Justin.Ashley@umassmed.edu, 508-856-3789 and OUME 508-856-2285.

OASIS Curriculum Management and Student Scheduling

Public Calendar for 2019-2020

Week View | Sun Mon Tue Wed Thu Fri Sat | August 11 - 17, 2019

Page Filter

- Show All Events
- Check/Uncheck All
- GSBS
- GSN
- Student Activities
- Year 1: FOM1
- Year 2: FOM2
- Year 3: CCE
- Year 4: AS

Calendar Grid:

Time	Sun 8/11	Mon 8/12	Tue 8/13	Wed 8/14	Thu 8/15	Fri 8/16
8AM	AS-M2, CCE-1C, FM-1, FM-2, Event 1, Event 1	AS-M2, AS-T2B, CCE-1C	AS-M2, AS-T2B, CCE-1C	AS-M2, AS-T2B, CCE-1C	AS-M2, AS-T2B, CCE-1C	FM-101, FM-102, OSD, AS-M2, AS-T2B, CCE-1C
9AM		FM-211: OSD sess 36, POHG session 3, POHG 1: Chromosomes, Sex, Determination & Dosage, Comerses	FM-211: OSD sess 8, OSD 2/RESP, Interactive Session: Problem Set 1: Obstruction; A-L in AMP 3 and M-Z	FM-211: OSD sess 12, OSD 2/RESP, Restriction/Pleura Disease/Pulmonary Edema, BWCT 1: Protein Structure, Hemoglobin, Room: Amphitheater III	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
10AM		FM-211: OSD sess 5, OSD 2/RESP: Obstruction Room: Amphitheater II	FM-204: DCS2 session 1, DCS 2: Introduction to DCS2 and I	FM-211: OSD sess 13, OSD 2/RESP: Sarcoid and Granulomatosis, BWCT 1: Enzyme Mechanisms, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
11AM		FM-201: Brain 19 4, BrainNSB 2: Spinal Cord 1 - Review of General Structure, Motor Pathways, Room: Amphitheater II	FM-102: BWCT 2019 4, BWCT 1: Nucleic Acids, DNA Replication & Repair, Room: Amphitheater II	FM-201: Brain 19 6, BrainNSB 2: Spinal Cord 2 - Ascending, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
12PM		FM-102: BWCT 2019 4, BWCT 1: Nucleic Acids, DNA Replication & Repair, Room: Amphitheater II	FM-101: POHG session 4, POHG 1: Mitosis, Meiosis and Nondisjunction, Room: Amphitheater II	FM-201: Brain 19 6, BrainNSB 2: Spinal Cord 2 - Ascending, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
1PM		FM-203-ICE2 session 1, ICE 2.1: Introduction to ICE / Dyspnea, Room: Amphitheater III 56-102 Case-based Instruction/Learning	FM-201: Brain 19 5, BrainNSB 2: Conference (whole class), Room: Amphitheater II	FM-211: OSD sess 10, OSD 2/RESP: Sarcoid and Granulomatosis, BWCT 1: Enzyme Mechanisms, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
2PM		FM-203-ICE2 session 1, ICE 2.1: Introduction to ICE / Dyspnea, Room: Amphitheater III 56-102 Case-based Instruction/Learning	FM-201: Brain 19 5, BrainNSB 2: Conference (whole class), Room: Amphitheater II	FM-211: OSD sess 10, OSD 2/RESP: Sarcoid and Granulomatosis, BWCT 1: Enzyme Mechanisms, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
3PM		FM-203-ICE2 session 1, ICE 2.1: Introduction to ICE / Dyspnea, Room: Amphitheater III 56-102 Case-based Instruction/Learning	FM-201: Brain 19 5, BrainNSB 2: Conference (whole class), Room: Amphitheater II	FM-211: OSD sess 10, OSD 2/RESP: Sarcoid and Granulomatosis, BWCT 1: Enzyme Mechanisms, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal
4PM		FM-203-ICE2 session 1, ICE 2.1: Introduction to ICE / Dyspnea, Room: Amphitheater III 56-102 Case-based Instruction/Learning	FM-201: Brain 19 5, BrainNSB 2: Conference (whole class), Room: Amphitheater II	FM-211: OSD sess 10, OSD 2/RESP: Sarcoid and Granulomatosis, BWCT 1: Enzyme Mechanisms, Room: Amphitheater II	FM-211: FM-1: OSD sess PURCH1	FM-101: POHG session 8, POHG 1: Mendelian & Chromosomal

Public Online Curriculum calendars: The online curriculum calendar is and in the OASIS public calendar of course sessions <https://umassmed.oasisscheduling.com/public/calendar/> (pictured above). The OASIS calendar for Advance Studies and Core Clerkship Experience is an institutional calendar with the blocks and important dates posted.



The [Academic calendars](#) are also posted on the OSA website and have separate listings for each academic year's calendar days showing holidays with no classes (pictured above).

Update/Maintain course schedule: Each year the OUME collaborates with course leaders to update or maintain the annual course schedule based on the prior schedules recorded in the curriculum calendar available in OASIS. Please notify the OUME staff administrator, Jean Welker Jean.Welker@umassmed.edu, of any changes to your course schedule.

Special Note to remember to share with the Registrar and Director of Financial Aid:

January 15th of the prior academic year: **Semester start/stop dates**

December 15th of the prior academic year: **Room requests**

Requests for advance standing process for FOM students should be directed to the Associate Dean for Undergraduate Medical Education, Melissa Fischer Melissa.Fischer@umassmed.edu, and follow these [Advanced Standing Guidelines](#) from 2011.

Generate or Update course website: Courses and clerkships have a website on the learning management system (LMS) Blackboard Learn (BBL). Any changes to the course information and materials are loaded onto the LMS by the course administrator. Each website uses a standard UMASS template to provide a consistent framework for students across courses. Academic Instructional Design & Technology strongly suggests following the template and add customization only as needed. To learn more, go to [BBL information](#).

Annual BBL Start-up: Academic Instructional Design & Technology staff complete course/clerkship startup activities for all iterations of a course into subsequent blocks or semesters. Single-semester courses are rolled over annually. Courses that cross semesters

are rolled over each semester. Clerkships are rolled over according to the block schedule set by Student Affairs or merged together at the discretion of the Clerkship Director(s).

- Teaching faculty and staff have access to course materials in BBL at all times
- A change in course start date requires an email by at least one course co-leader to (<https://www.umassmed.edu/it/>) for modification in the BBL system
- Students have access to course content starting 7 days prior to the course's start date (set by the Curriculum Calendar) unless dates are changed by the course co-leaders
- Course content for Foundations of Medicine (FOM) Years 1 and 2 is accessible to students for a period of 1 academic year after they have been actively enrolled in a course

At the initial start-up of each course (new and ongoing requests), the OUME will ask course leaders to:

- Provide a list of faculty and staff who should have access to their BBL course website.
 - Faculty and staff formally associated with a course, or students enrolled in the course in Campus Solutions (PeopleSoft), gain access to course materials in BBL. Login credentials are sent to the email address on file for the user (usually a umassmed.edu or umassmemorial.org email address.)
 - Each course has a minimum of one course administrator to upload course content for course co-leaders and teaching faculty. Backup support, within a department or across departments, is strongly recommended.
 - Request to add or remove faculty and staff by contacting the OUME staff administrator, Jean Welker Jean.Welker@umassmed.edu, (access takes about 3 business days)
 - Grant access to faculty from other courses to promote coordination and collaboration
 - Submit [a ticket](#) to request BBL access or for any BBL questions

New and returning UMMS users (students, faculty, and staff) can receive BBL support Monday through Friday 7:30 AM-5:30PM by calling 508-856-8643 or submit [a ticket](#). Please refer to the Blackboard Learn login page for details at <https://umassmed.umassonline.net/webapps/login/>.

Development of Course Content in BBL:

Course content typically includes the following content types:

- A syllabus, a session table with lecture notes and PowerPoint files converted to PDFs
- Audio-narrated PowerPoint presentations (e.g., PPT recorded in Kaltura)
- For FOM1 and FOM2 courses, slides and materials should be posted in the learning management system at least 5 days in advance of class.
- Assessments and Assignments presented using the native BBL tools, and integrated with the Grade Center
- Video files can be integrated into the course; please consult with the Academic Instructional Design team on the best technology solution
- Standard policies documents and links to UMMS resources available in BBL template

Update your course components for the OASIS curriculum database:

Your course events, objectives, instructional methods, assessment methods and resources are posted in OASIS. For updates to your course and session information, please contact Gail March Cohen, PhD., Assistant Dean for Undergraduate Medical Education, Gail.MarchCohen@umassmed.edu, 508-856-5641.

Course Objectives in OASIS are posted and linked on two levels:

- 1) All course objectives are mapped to the [UMMS Educational Objectives](#)
- 2) All sessions (termed events in OASIS) are mapped to the appropriate course objectives

Review any existing course materials and check that the learning objectives use [active verbs](#) and the instructional strategies and assessment methods reflect the learning objectives. Avoid the use of the verbs that are open to interpretation and difficult to measure in assessments such as know, learn, appreciate, be familiar with, understand, be aware of, and demonstrate understanding.

Instructional methods, assessment methods, and resources are mapped to your course in OASIS using the Association of American Colleges (AACSB) Curriculum Inventory Report (CIR) language. To see the list and definitions of the terms, go to [Medbiquitous terminology](#).

Course Development: The Course Co-leaders are responsible to---

- Recruit faculty to teach, create, update and share key course elements such as objectives, teaching methods, requirements regarding course materials and teaching expectations
- Request specific educator development sessions from the OUME to support and improve faculty teaching
- Review course expectations and objectives
- Oversee faculty material, provide feedback regarding clarity, format, scope and appropriateness of content with a goal of consistency of format and coordination of topics to support student learning
- Work with the OUME to build and maintain materials and databases required for curriculum management and accreditation
- Consult with faculty to promote best practices in material development (see below) such as materials being available in advance of class; inclusion of specific objectives, summary slides, key points, reflective questions to promote understanding and self-assessment; slide labeling with faculty members' last name, course abbreviation and year as a footer; development of exercises or questions for formative and summative student performance assessment.

Best practices for course materials: In order to support your teaching, the OUME offers educator development and shares resources and best practices for large and small group teaching with course leaders and faculty. Please contact us if you are interested in specific topics. Contact: Gail March Cohen, PhD., Assistant Dean for Undergraduate Medical Education Curriculum, Gail.MarchCohen@umassmed.edu, 508-856-5641

Best practices for developing new course materials include:

- Write clear and specific learning objectives using [active verbs](#)
- Describe your instructional methods, assessment methods, and resources using [Medbiquitous terminology](#)
- Base your assessment methods on measuring achievement of the learning objectives
- Create lecture slides with plain backgrounds (no patterns or photos) and use contrasting backgrounds and fonts (e.g., black font on yellow or pastel backgrounds, OR yellow/white font on blue background). Plain white backgrounds are too glary on the eyes.
 - Have a slide stating conflict of interest status
 - Include a title for each slide
 - Limit text on the slides to the “Joy of Six” – 6 words per line, 6 lines per slide
 - Simplify charts, figures and tables to show only the information you want your students to learn
 - Cite sources in 12pt font at bottom
 - Add UMassMed logo to lower right corner View>Master Slide>copy and paste, OR Option to use the [UMMS template](#)
 - Begin with learning objectives and end with summary slide that answers the learning objectives
- Adhere to best practices in large and small group materials development [Student Perspectives on Effective Teaching](#)
- Save all course materials as a pdf (including lecture slides) to upload to Blackboard Learn (BBL) for student annotation and archiving. Do not use IE or Chrome to open PDFs because sometimes they show only the 1st slide (browser issue, not BBL)
- Submit educational materials to administrators 5 days in advance to allow timely upload and review by students (if possible, materials should not be edited after upload as many students download and annotate materials prior to course sessions)
- Communicate changes in materials to students by email or before class when these changes are necessary

More information is available on the [OUME website](#)

FOM1 and FOM2 Preparation and Consolidation Time: In addition to course session hours, course leaders are allotted to schedule time “out of class” that can be used to assign students self-directed work that relates to an upcoming class session (preparation) or reinforces concepts after class sessions have occurred (consolidation). This time is allotted in 1 hour segments (maximum 2 hours per day, 10 hours per week across all courses) and often includes a brief formative assessment to allow students to gauge their mastery of the material. Use of all preparation and consolidation time by course leaders is optional. Preparation and consolidation time augment classroom learning and do not replace student homework or study time.

Guidelines can be found: [Preparation and Consolidation Guidelines](#). ‘Best practice’ examples can be accessed at: [Examples of Preparation and Consolidation Assignments](#)

As part of the 2020 Curriculum ReVolution Initiative, course leaders are requested to convert 10% of course lecture time to independent learning. The AAMC defines independent learning as **“Instructor/mentor-guided learning activities to be performed by the learner outside of formal educational settings (classroom, lab, clinic) (Bowen & Smith, 2010); Dedicated time on learner schedules to prepare for specific learning activities, e.g., case discussions, TBL, PBL, clinical activities, research project(s).** All independent learning events converted from a previous lecture time will appear in the OASIS calendar in its place and titled as independent learning. Preparation and Consolidation assignments are independent learning events. Also, preparation for a flipped classroom is independent learning and is titled Independent Learning for Flipped Classroom in the OASIS calendar.

FOM1 and FOM2 outreach for teaching assistants (TA’s): Some courses benefit from student TA’s. A sample information and recruitment letter is available here [Sample Application Letter to Recruit TA Student](#). A letter should be sent to the Associate Dean for Student Affairs (ADSA), Sonia Chimienti, Sonia.Chimienti@umassmed.edu acknowledging student efforts as TA’s for inclusion in MSPE and with cc to Assistant Dean for OUME, Gail March Cohen, PhD., Gail.MarchCohen@umassmed.edu.

FOM1 and FOM 2 Lecture Capture and Audio Podcasting Capture: Lectures and presentations are digitally recorded by the ECHO360 system scheduled in Amphitheaters (1,2,3), Goff Auditoriums (S1-607 and S1-608), the Sherman Center Auditorium (AS2-2102), and the Integrated Teaching and Learning Center (iTLC). Presenters do need to wear a provided microphone to capture the audio and anything projected via the classroom LCD projector is recorded. Echo 360 also has Universal Capture to record audio and video on a personal computer. Contact IT to request access. For more information, see the [ECHO360 Knowledge Base](#).



A video camera icon on the OASIS calendar event indicates that a session will be recorded using video capture for student viewing through the learning management system (LMS). Faculty will need to contact the UMMS Help Desk for assistance to change the default opt in and opt out (e.g., patient privacy request) for their sessions. Video capture is meant as an adjunct to the curriculum.

“Opt out” options:

- Sessions are recorded and posted as video files by default unless faculty 'opt out' which is most commonly done if patients will be part of the session and do not wish to be recorded.
- The lecture capture system also records and posts audio podcasts of all sessions by default unless faculty choose to 'opt out'.

“Opt in options:

- If faculty would like to have sessions captured in *audio AND video* using podcast format, they must 'opt in' for the *VIDEO* podcasting option.
- If the system fails, course leaders may request posting of similar sessions from the prior

year by contacting the UMMS Help Desk. Academic Computing detects the problem (or is informed by others). Information Services (IS) contacts the course leader and administrator to either:

- Say they have a similarly titled lecture video from last year; or
- Ask if there was a similar lecture the prior year.
- Course leader or administrator confirms it is ok to post the prior version with the individual faculty member. Course leader or administrator asks IS to post.

HIPAA requirement– Obtaining consent from patients to be photographed or videotaped for educational *purposes*. Bringing patients into the classroom, or using their images, histories or data to help educate our students are powerful ways to reinforce clinical relevance and our UMMS competencies in our teaching. Please be aware that in order to protect patient confidentiality:

- ✓ All personally identifiable information regarding patients should be carefully removed from data, images or any patient-specific materials before sharing with students
- ✓ Patients who agree to be photographed or videotaped, even by our standard lecture capture system, must complete a specific consent form in advance. Verification of this consent is the course leader's responsibility. This form can be accessed at: [Consent to Participation Photography and Publication](#).

Accreditation standards: The Liaison Committee on Medical Education (LCME) accredits the medical school and the next UMMS review is August 2020. The curriculum data from AY18-20 will be collected and reported to the LCME. This is a valuable opportunity for curriculum quality assurance and improvement. When writing your course and course materials, consider the LCME elements. More information is available on the UMMS LCME Accreditation Institutional Self-study website at: <https://www.umassmed.edu/lcme/accreditation-faq/>

Integrating classroom technology into the course: Academic instructional Design and Technology Team supports faculty and staff in the use of technology used for teaching and learning activities in classrooms, amphitheaters, and conference rooms. These technology tools include Echo 360 lecture capture, ZOOM for video conferencing, Kaltura for video and Top Hat for interactive slide presentations. Academic Technology staff train faculty and staff in the use of these tools prior to their use in the classroom, and also support faculty during their delivery of lectures and events. A minimum of 48-hour advance notice is kindly requested for scheduling purposes. To learn more about all the technology options, go to <https://www.umassmed.edu/it/services/Academic-Technology/>. To arrange for custom IT training, contact: AcademicInstructionalDesignandTechnology@umassmed.edu

Student Laptop Requirement and Technology Orientation Sessions: UMMS requires all incoming students to bring a laptop with them to act as a portal to online courses, streaming lectures and media, computer-based testing, virtual microscopy slides, and digital lecture notes. As a collaborative effort, Academic Technology staff work closely with centralized school services to develop and maintain standards for student laptops and ensure that all necessary

security resources, links to required software, and minimum and preferred system requirements are clearly defined and available to students. In addition, they will organize and conduct Technology Orientation sessions with students during their first two days at UMMS to ensure the proper functioning of their laptops and familiarity with necessary technology tools and resources.



Integrated Teaching and Learning Center (iTLC): This learning environment has high-definition display of images that facilitates small group collaboration, Computer-Based Testing (CBT), and interactive multimedia teaching and learning. The iTLC is sponsored by the Office of Educational Affairs (OEA) and is jointly supported by Information Technology (IT) and OEA. The iTLC space is scheduled through the Office of Undergraduate Medical Education.

How to Prepare Your Exams?

Exam Administration: Courses are responsible for preparing materials for and administering their own exams including securing proctors. Academic Instructional Design & Technology can provide support for proper exam structure and settings in BBL and standardized computer-based testing. Contact the Office of Institutional Research, Evaluation, and Assessment (IREA) IREA@umassmed.edu for specifics regarding exam preparation. Contact for proctors the OUME staff administrator, Jean Welker Jean.Welker@umassmed.edu.

Exam/Assessment Structure: Exams are designed or selected by course leaders and can be built internally or draw from external sources (such as the NBME customized assessments or question banks created by national societies). **We encourage assessments that demonstrate the skills required of a physician including application of knowledge, teamwork, communication and problem solving.**

Exam Structure in PeopleSoft Gradebook: Information on exam structure (dates, number of exams, names of exams, weights, cutoffs) is collected in writing by IREA at least 2 weeks prior to the course start date. If IREA does not receive such information, weekly follow-ups with cc to Senior Director for IREA and Associate Dean for OUME will be sent to course co-leaders and administrators.

Course leaders will be able to:

- ✓ Determine the appropriate assessment format (multiple choice, short answer, essay, paper...individual or team-based... standardized patient encounters, simulation or objective structured clinical exams (OSCE)
- ✓ Select In-class or take home, open note or closed book, and include a professionalism statement about sharing answers

- ✓ Implement a diversity of methods
- ✓ Ask faculty for internal exams to write questions while creating teaching materials to include key points (OUME can arrange for faculty development in best practices for question-writing, contact Gail March Cohen, PhD., Assistant Dean for Undergraduate Medical Education Curriculum, Gail.MarchCohen@umassmed.edu, 508-856-5641)
- ✓ Review and edit questions as necessary
- ✓ Administer online (using BBL or ExamSoft)
- ✓ Score the assessment with faculty and others
- ✓ Assess student clinical performance with the Student Performance Evaluation (SPE) form
- ✓ Provide formative assessment (not included in final grade) and feedback (verbal and narrative) throughout the course to identify and address learning needs
- ✓ Design the summative assessment to count as no more than 80% of the final grade

Online Assessment Tools and Computer-Based Testing Efforts: Teaching faculty have taken the initiative to leverage online assessment tools for the administration of tests at UMMS. The Bring Your Own Device (BYOD) program is currently in place for National Board of Medical Examiners (NBME) standardized tests.



ExamSoft is available for online assessments and students download exams on their devices through Examplify at set times in a secure environment. Question items can be stored in a question bank for your course and tagged with IREA categories. See the [ExamSoft Knowledge Base](#) for more information.

FOM1 and FOM2: Course leaders in FOM1 and FOM2 need to inform students regarding expectations around assessments:

- Describe the kind of assessments used in the course
- Explain the access students will have to assessments
- Recognize any sample responses/answers

To support consistency among courses regarding definitions, communications with students and standard practices, the FOM 1 and FOM 2 curriculum committees jointly adopted a policy that is posted on all BBL web sites [Policies and Procedures Applicable to All FOM Courses Approved by Curriculum Committees](#)

Pre-exam reviews for FOM1 and FOM2 students: As course leaders, you will option to provide pre-exam reviews and in various formats. You can invite faculty to review key topics and answer student questions prior to exams. These sessions can occur in scheduled course time or as optional sessions outside of course time that do not conflict with other courses or protected time. Sessions should be scheduled at the start of the course so students can plan to attend. If

they occur outside of scheduled class time, they must be labelled optional. Course leaders should indicate whether these should be recorded (to arrange pre-exam reviews, contact Maria Paz Torres Gutierrez (OUME), Maria.TorresGutierrez@umassmed.edu, (508) 856-5642)

Post-exam review for FOM1 and FOM2 students: Course leaders are expected to provide feedback on summative in-class exams to support learning. (This is not feasible for NBME-customized exams.) It is best if post-exam reviews are scheduled at the start of the course so that students can option in advance to attend. Post exam reviews for summative in-class assessments should have the following components:

- 1) Answers should be projected or posted immediately after the exam to allow students to compare their own notes (on scratch paper or by memory) to correct answers and estimate their performance

- 2) An optional time approximately 1 week after the exam to review exam items and answer questions in detail with students as a group.

Exams in Courses with Block Structure: Some courses are organized into blocks due to the amount or framing of content and skills. Each of these blocks should have a 'block leader' to serve as primary contact for students, faculty and administration and to provide general oversight for the block following the model provided by course leaders (recruit faculty, review materials, create exam questions, etc.) Blocks are not free-standing courses and thus appear as course components in the grading process. Block grades may be the responsibility of the block leader, but should be completed in consultation with the course leaders who are ultimately responsible for ensuring timely submission to IREA. Block leaders may participate in post exam reviews and other administrative sessions at the discretion of the course leaders.

Missed exams: The only acceptable excuses for not taking an exam at its scheduled time are religious observances, personal illness or serious illness/death of an immediate family member. Any such conflicts should be brought to the course leaders attention as early as possible in the academic year. The course leaders/administrator will help with any missed material and facilitate the rescheduling of the missed exam. Course leaders may ask the student to provide a physician's note documenting a personal illness. See [Student Handbook](#) for further details.

Exam Scoring and Reporting: Preliminary item analysis, histogram, alphabetic and descending exam score reports will be emailed in a PDF format to the course co-leaders and representatives within 3 working days after receiving exam sheets with answer key or after the official exam date in ExamSoft. The IREA office can provide a copy of student exam answer sheet after notification and approval from the respective course co-leaders. For AY19/20, a request for a copy of student exam sheet should be sent to Ashlyn Roy (Ashlyn.Roy@umassmed.edu).

The timeline from date of exam to exam grade reports being available to students is largely dependent on course co-leaders' timely review of results, and any subsequent rescoring

requests. After course co-leaders have completed their review including rescoring requests, IREA needs up to 3 days to upload the results for student viewing.

Uploading Student Exam Scores to Gradebook in the PeopleSoft Database: A request in writing to IREA is needed to authorize the upload. Any discrepancies regarding the class roster need to be immediately reported by course co-leaders or their representatives to the Registrar's office. Submitting each set of exam scores as soon as possible is strongly recommended. Submission of ALL exam grades at the end of course significantly extends overall processing time. Uploading the exam scores to the PeopleSoft database makes the scores immediately available to the students and the Associate Dean for Student Affairs. For adjustments to an exam score(s) that has/have been uploaded to Gradebook, please notify IREA in writing.

Training Opportunities via IREA: IREA is pleased to offer training, as needed, to course co-leaders/block leaders, clerkship directors, and/or department Chair "walk-through" of evaluation reports and in areas related to assessment item writing, test construction, post exam, and evaluation review including review of statistical analysis of items/questions and overall test. IREA Contact information: *Main Office - Room S4-144: Phone 508-856-6009, Fax 508-856-5310*

What You Need to Know about Grading?

Key Student Affairs Policies and Definitions: The [Student Handbook](#) describes academic and professional requirements for students, school policies, electives and other opportunities. Many of these policies are relevant to course leaders as well. These include:

- Students' academic performance/grading with regard to advancement
- Honor Code and Professionalism
- Preclinical and Clinical Grading and Progress Board Processes

Uploading Final Scores & Letter Grades to PeopleSoft: Course co-leaders or their representatives must provide the final course grade to IREA within 3-5 business days of end date of course. To meet LCME Standard 9.8, IREA requires final grade submission within 2-4 weeks. In order to ensure compliance, IREA will send an email one business day after last course activity as listed in OASIS calendar, and weekly follow-ups, as needed, with cc to Senior Director for IREA and Associate Dean for OUME. These emails will request final grades and cite LCME Standard 9.8.

Uploading the final course grades to the PeopleSoft database will require signatures of all course co-leaders on the final grades packet provided by IREA. The signature(s) should be returned within 3-5 business days of receipt. The final course grades will be rounded to the nearest integer. IREA is unable to submit an official grade of a 'W' (withdrawal) for a student. These official grades can be submitted/entered only by the Registrar's office.

Once the signed final grades packet is returned, the final grades will be uploaded to PeopleSoft's Gradebook. Uploading the final grades into PeopleSoft database will make the final letter grades

immediately available to the students and the Associate Dean for Student Affairs. If the final numerical grade is different from what PeopleSoft calculates based on the uploaded components, the student will not see an accurate final numerical grade via the 'student view' in PeopleSoft.

Three business days after the upload, final grades will be submitted to the Registrar's office. Once grades have been submitted to the Registrar's office, an official grade change form at the Registrar's office will need to be completed if a grade change is needed. Grade changes completed through the Registrar's office are not viewable in Peoplesoft via 'student view.'

FOM1, FOM2 and Non-clinical Advanced Studies: Foundation course exam grades are uploaded to PeopleSoft by IREA after review by course co-leaders. Exam grades are available to students in PeopleSoft gradebook as soon as they are uploaded by IREA.

Final course grades are computed by course co-leaders and submitted to IREA, who then upload to PeopleSoft. Final grades are available to students in PeopleSoft as soon as they are posted. Some courses choose to also notify students about grades by direct email, Blackboard, ExamSoft, and/or OASIS. IREA monitors FOM grade turn around in support of OUME's oversight. The registrar also provides reports regarding grade turn-around to the Associate Dean for OUME when requested in order to monitor compliance with timeliness of grade availability for students.

All FOM course co-leaders utilizing IREA services are required to sign off on final course grades indicating they approve student grades. Specifics for sign-off are as follows: After IREA is notified in writing (email is fine) that the grades are finalized, the final grades authorization form will be sent by IREA via email to the course administrator and course co-leaders for signature by all course co-leaders for that respective course. The signed authorization form must be returned to IREA (email is fine) with signatures. Once received by IREA, course final grades will be uploaded to PeopleSoft.

After receipt of the signed final grades authorization form, IREA will upload the final grades within their standard 3-day turnaround timeframe. At this point, students can see their official final grade. IREA allows 3 days for course co-leaders to make any further adjustments before posting the final grade to the Registrar's office. After posting to the Registrar's office, any additional grade changes must be made directly with the Registrar's Office. If students have any problems with or questions regarding access to exam grades via Gradebook on PeopleSoft direct them to contact the [UMMS Help Desk](#) - telephone: 6-8643.

Core Clinical Experiences (CCE) and Sub-internships: Clerkships can submit preliminary grades in SharePoint in the event that final grades rely on shared assessments that do not occur within the 6- week timeframe. These should be finalized within 5 weeks of the shared assessment. Final course grades are computed by clerkship leaders or their representatives who submit into OASIS, with automated feed to PeopleSoft (system of record). Final grades are available to

students in PeopleSoft as soon as they are posted. Some clerkships choose to also notify students about grades by direct email.

The OUME tracks clerkship grade turn around in order to monitor compliance with timeliness of grade availability for students. The Registrar's office provides reports regarding clinical grade turn-around on request. Clerkship directors or their representatives submit information through the online SharePoint site at: [SharePoint Grade Tracking](#). *(If you receive an error message, this means you have not yet been given access to this site. Contact [Tina Pierce](#) administrator for this SharePoint site and she will provide you with access.)*

Note: Grade tracking instructions can be found at: [Instructions for Recording Grades](#)

Reporting Grades to Students: Students can access exam grades (if recorded as such, see above) and course grades using Gradebook on the PeopleSoft management system. In addition, course leaders may share grades by utilizing Blackboard, ExamSoft, OASIS, or email. For courses with appropriate methods such as substantial small group elements, **narrative feedback** must be a formal part of each grade.

Any students who have difficulty within a course (no credit, credit marginal or other performance issues) must be formally notified in writing (email is sufficient) with a copy to the student's learning community mentor to promote follow-up and appropriate support from course leaders, faculty, and the Center for Academic Achievement (CAA). This should happen within 1 week of grade determination, and at other relevant times in the semester, for instance, after individual assessments. All course and clerkship grades must be available to students within 6 weeks of course or clerkship completion.

Determination and Changes to Grading Process: Details regarding levels of performance required for attainment of specific course grades (no credit, credit marginal, credit or below expectations, expected, above expectations, outstanding) must be published on the course website and shared with the students at the start of the course; any changes to these benchmarks should be designed to support students (and thus may be loosened but not made more strict) at the course leaders' discretion. These changes require updating the course website and clear communication to students. These changes require updating the course website and clear communication to students.

Remediation: Remediation is determined by the course and clerkship leaders in conjunction with the appropriate Academic Evaluation Board and is tailored to the student's learning need. Students receiving a grade of less than Credit (CR) on any element of a course or clerkship may be discussed at a Basic or Clinical Sciences Academic Evaluation Board meeting with regard to the plan for the remediation of that grade. All required clerkships during the clinical years must be passed. Any grade of "Fail" on a required clerkship requires the repetition of the full clerkship. Any basic science course with a grade of NCR must be repeated unless course leaders and the BSAEB permit an attempt at remediation. This may include the taking of a comprehensive examination or other alternative mechanism. Course leaders are

encouraged to share exams with the Center for Academic Achievement faculty and allow students to retake exams to support learning and determine readiness to complete remediation exams. Course directors determine if students may carry 'No Credit' (NC) grades on individual course elements (exams, assignments, blocks) and still pass the course. For additional information regarding remediation policies see the medical school student handbook at: [Student Handbook](#).

Mentor Connections: Each medical student is assigned a Learning Community mentor who works with the student longitudinally throughout the student's academic career in areas related to professional and personal development and academic achievement. Course and clerkship leaders who have concerns about students in any of these areas should reach out to the student's mentor to engage the mentor in working with the student. This includes poor performance on assessments, but may also include inappropriate classroom, email or small group behavior, incomplete assignments or other concerning actions. Student-mentor lists are updated and posted.

Basic and Clinical Science Academic Evaluation Boards (BSAEB/CSAEB): These boards include the leaders of each course or clerkship as well as ex-officio members. The BSAEB serves for FOM1 and FOM2, the CSAEB serves for CCE and AS. It is the boards' responsibility to periodically review student academic records to recommend students to the Progress Board for academic advancement, remediation or dismissal, to consider any extenuating circumstances which may have contributed to academic performance, and to determine the nature and process of academic make-up and remediation, if possible, for students who have not satisfactorily completed all academic requirements. (see [Student Handbook](#)). These boards are managed by the Office of Student Affairs.

Your Course Feedback and Reviews

Course feedback groups with students: These voluntary sessions occur with a small group of students at the request of course leaders. They provide an opportunity for direct discussion and sharing of ideas with a subset of students in real time and on a deeper level than via course evaluations. Most co-leaders formulate 3-4 questions of interest relevant to their course and then facilitate student discussion and encourage constructive feedback by the group. For example: "Students from last year told us X and this year we did Y. What did you think?" Groups are scheduled by **Maria Paz Torres Gutierrez**, [\(508\) 856-5642](tel:5088565642), Maria.TorresGutierrez@umassmed.edu in the OUME at the course leader's requested times.

Foundations of Medicine (FOM)1 and 2 course leader meetings with student course representatives (*varies depending on course length, meetings occur during course and after course evaluations are received.*) : Each FOM course is assigned one primary (and perhaps secondary) student representative from the group of student curriculum committee representatives who meets with course leaders to discuss issues of concern to students or faculty, serve as liaison between the class and the course leaders, meets with course leaders

after a course evaluation to prepare the internal course review and attends curriculum committee meetings as the student voice. Student Curriculum Committee representatives are named annually by the SOM Student Body Committee (SBC).

Internal course quality improvement review (*every year*): A required, structured annual review is created in collaboration with the student course representatives and presented to curriculum committee. The review incorporates a curriculum database review and follows a specific format. The final review is posted on the Educational Policy Committee (EPC) [website](#) providing broad access to the institutional community. The FOM internal course review form is available under committees on the intranet.

Periodic Course/Clerkship Review (*scheduled on request by contacting Dr. Melissa Fischer and Dr. Mary Zanetti*): Periodic meetings with Associate Dean of UME, Dr. Fischer, and with the Senior Director, Dr. Zanetti, of the Institutional Research, Evaluation and Assessment (IREA) are available if requested by course leaders in order to review student feedback, performance and assessment, plan feedback to teaching faculty, feed-forward to other courses and students and course planning for the following year.

Feedback to Faculty: Course and clerkship leaders are responsible for providing faculty with feedback regarding their performance or provided course materials in order to promote ongoing course improvement. Course leaders and administrators also access end of block or course evaluations from the IREA. Students evaluate anonymously individual course and clerkship faculty through the OASIS (**O**nline **A**ccess to **S**tudent **I**nformation and **S**cheduling) database when they evaluate the course. This is reported in summary format to the course leadership and faculty. In addition, many course and clerkship leaders observe faculty teaching, particularly when they are new to the course (this can be done in real-time or through viewing lecture capture). Each of these methods provides an opportunity to offer specific feedback and reinforce teaching performance expectation with faculty.

Faculty, who self-identify or are identified by course leaders or chairs as needing development, can receive assistance from course leaders, the OUME, or office of Faculty Affairs. They may reach out to course leaders or individual faculty to support ongoing course improvement.

What are Your Educational Resources?

Office of Undergraduate Medical Education (OUME)

The vision of the OUME is to advance education, community and scholarship at UMMS. In doing so, we collaborate with partners including campus and community-based faculty, students, other UMMS offices, programs and departments; local and worldwide clinical and educational affiliates and community programs and advocates. We assist in the coordination and support innovation, quality improvement and excellence in all years of the School of Medicine curriculum including a number of pathway and interprofessional courses and programs. In addition, the OUME sponsors specific courses and educational programs such as Doctoring

and Clinical Skills, Flexible Clinical Experiences, Transitions and the Capstone Scholarship and Discovery Courses; Global Health Pathway and Summer Research, Curriculum and Community Service Programs and supports the work of the Educational Policy Committee (EPC).

Contact information: Main Office – Phone 508-856-2285, FAX 508-856-5536

Institutional Research, Evaluation, & Assessment (IREA)

The Office of Institutional Research, Evaluation, and Assessment (IREA) provides direction and support to faculty and administrators in student assessment, curriculum evaluation, and medical education research. The IREA gathers, analyzes, and reports the data that supports numerous critical functions outlined in the medical school's mission including student exams and grading, administrative reporting (e.g., educational performance measures and quality indicators for mission-based management), course and clerkship evaluation, accreditation for LCME and NEASC, and outcomes to support grants and scholarly activity.

In the area of assessment, we consult on test construction, score examination data, conduct item and test analyses, and produce reports for students and faculty. In the area of curriculum evaluation, we provide instrument design and production services, data analyses, evaluation, interpretation of results, and reporting.

We conduct research in medical education, as well as consult and assist with research design, instrument design, data collection and analyses, interpretation of results, and preparation of abstracts and papers for submission to journals and conferences. Contact information: Main Office - Room S4-144: Phone 508-856-6009, Fax 508-856-5310.

Office of Student Affairs (OSA)

The Office of Student Affairs strives to promote a supportive and responsive environment where students find help coping with the academic, personal and social demands of graduate education. OSA nurtures a diverse culture inclusive to the sensitive needs of our students, staff, faculty and visitors.

The Office of Student Affairs also provides support for a variety of student activities, such as assignment of core clinical activities and fourth year studies, administration of the NRMP (National Residency Matching Program), Electronic Residency Application Service (ERAS), VSAS (Visiting Student Application Service), Medical Student Performance Evaluations (MSPE), orientations to inform and prepare students for all four years of medical education, commencement, and graduation activities. Student Affairs also coordinates the Basic Science and Clinical Science Academic Evaluation Boards, Progress Board, administrative support for all student-run group and organizations as well as the Student Body Committee (student governance group). In these roles, the Office acts as an advisor both to students and faculty to help facilitate and carry out timely and informed decisions. Contact information: 508-856-2285
Fax: 508-856-5536, **Email:** studentaffairs@umassmed.edu, **URL:** <http://www.umassmed.edu/studentaffairs>.

Lamar Soutter Library

Are you looking to implement a new pedagogy, find a medical education conference, or to publish your educational resource? The Medical education page <http://libraryguides.umassmed.edu/medicaled> provides links to books, medical images, journals, LCME standards, medical education conferences, news & alerts, OEA annual reports, and selected bibliographies. Join the discussion in medical education blogs listed here <http://libraryguides.umassmed.edu/faculty/mededblogs> . Contact for assistance: Jessica Kilham, MLIS AHIP Jessica.Kilham@umassmed.edu , 508.856.6028.

Academic Instructional Design & Technology (AIDT) (formerly Academic Computing Services (ACS))

The Academic Instructional Design & Technology group, a division within Information Technology (IT), provides a range of services to support faculty, students and staff in the use of technologies integral to the University's educational and research missions. The AIDT team provides services campus-wide across all schools. AIDT staff members are subject matter experts in information and instructional design, multimedia development, and the integration of technology tools and solutions for teaching and learning. The suite of services provided by AIDT [website](#), and IT overall [IT website](#).