Online Course Teaching & Building Rubric (OCTBR)

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The OCTBR (pronounced "October") tool is a Creative Commons-licensed rubric developed originally for health science instructors, to provide perspectives and resources for building online courses, assessments and experiences.

OCTBR has been influenced by student survey feedback originally analyzed by David del Pino Kloques at University of Texas-Medical Branch, and excellent Creative Commons-licensed rubrics and tools, namely CSU-Chico's QOLT (*Quality Online Learning and Teaching*) instrument, and Joan Van Duzer's *Instructional Design Tips for Online Learning,* and reflects on peer-reviewed learning and assessment strategies specific to health science education. Some institutional design rubrics are primarily used as an evaluation and/or scoring tool for courses. Other rubrics are excellent for introducing philosophical ideas about instructional design to a neophyte instructor. Both practices are not as well suited for faculty who must design a course and assessments while also juggling 12 hour shifts, Grand Rounds, surgeries, assessing students or residents in clinic, etc. Overall, the intent for OCTBR is not to be prescriptive, but offer concrete strategies for integrating best overall practices in online courses, and successful assessment and learning design in the health sciences.

To improve OCTBR's ease of use, a group of checklists have been developed for quick reference, since faculty availability, especially among clinical educators, can vary greatly. The different checklists are named to match the time available to build a course or courses launching in the Fall semester ("October"). If a faculty member has an extremely short amount of time to design a course, they would use the Autumn checklist to consider possibilities for their course. If at least a month is available, rather than weeks, the Summer checklist is appropriate. The Spring checklist is for those who have at least three months to build a course, while the Winter checklist is for a course designed almost a year in advance, or several courses developed by a department team.

Online Course Teaching & Building Rubric (OCTBR)

Course Components				
	Course Overview and Information			
	Basic / Updated **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Introduction to Instructor and Program	• Instructor lists email, office telephone and best times for contact. • Instructor schedules and lists times & locations for both online and face-to-face office hours. • Instructor lists email and office telephone for program and/or department. • Instructor lists expected turnaround for email replies (e.g. "48-72 hours Monday through Friday, 8-5").	• Instructor lists email, office telephone and best times for contact. • Instructor schedules and lists times & locations for both online and face-to-face office hours. • Instructor lists email and office telephone for program and/or department. • Instructor lists expected turnaround for email replies (e.g. "48-72 hours Monday through Friday, 8-5"). • Distance learners can take an assessment of readiness for online learning (such as Williams & Penn State, n.d., or Stanislaus State & Pillsbury, 2016), and self-assess their abilities, practice and attitudes about online courses.	• Instructor lists email, office telephone and best times for contact, and embeds a picture of themselves. • Instructor schedules and lists locations for both online and face-to-face office hours. • Instructor lists email and office telephone for program and/or department. • Instructor lists expected email turnaround for replies (e.g. "48-72 hours Monday through Friday, 8-5"). • An online readiness assessment (such as Williams & Penn State, n.d., or Pillsbury, 2016) helps learners self-assess abilities, practice and attitudes.	• Instructor lists email, office telephone and best times for contact, and embeds a picture of themselves. • Instructor schedules and lists times & locations for both online and face-to-face office hours. • Instructor lists email and office telephone for program and/or department. • Instructor lists expected turnaround for email replies (e.g. "48-72 hours Monday through Friday, 8-5"). • Links are provided to the program & department websites. • An online readiness assessment (such as Williams & Penn State, n.d., or Pillsbury, 2016) helps learners self-assess abilities, practice and attitudes. • An introductory & welcome session is held using videoconferencing (Skype, Google Hangout, etc.).

Course Overview and Information (con't)				
Course Components	**Basic / Updated 1**	**Core 2**	**Accomplished 3**	**Best Practice 4**
Course Introduction	• An overview of the course is provided, explaining the course's purpose and objectives, and its format (online, hybrid, PBL, etc.). • Rules of conduct and netiquette are defined for learners. • Expected turnaround time for receiving feedback on work is stated. Any policies about late work, including policies at the department, college or university level, are included.	• An overview of the course is provided, explaining the course's purpose and objectives, and its format (online, hybrid, PBL, etc.). • Rules of conduct and netiquette are defined for learners. • Prerequisites and other requirements, including any technical requirements, are summarized for learners • Expected turnaround time for receiving feedback on work is stated. Any policies about late work, including policies at the department, college or university level, are included.	• A welcome message is provided in text format. • An overview of the course is provided, explaining the course's purpose and objectives, and its format (online, hybrid, PBL, etc.). • Rules of conduct and netiquette are defined for learners. • Prerequisites and other requirements, including any technical requirements, are summarized for learners. • Expected turnaround time for receiving feedback on work is stated. Any policies about late work, including policies at the department, college or university level, are included.	• A welcome message is provided in video format. • An overview of the course is provided, explaining the course's purpose and objectives, and its format (online, hybrid, PBL, etc.). • Rules of conduct and netiquette are defined for learners. • Course objectives are each described in more detail, providing context to existing educational programs and future professional practice. A program map can be a helpful way to situate a specific course in the sequence. • Prerequisites and other requirements, including any technical requirements, are summarized for learners. • Expected turnaround time for receiving feedback on work is stated. Any policies about late work, including policies at the department, college or university level, are included.

		Course Design and Accessibility (con't)		
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Course Organization (con't)	• Content is structured to be easily navigated, and intuitive. • A clear "entrance" with an introduction to the course is noted on the main landing page or top-level folder ("Start Here: Introduction"), allowing students to quickly and repeatedly find time-sensitive, organized materials. • Extraneous tools or links are removed from menu. • All sequenced content is listed in the course, and full materials (content readings, assessments, assignments) are available for the first **four weeks** of the course.	• Content is structured to be easily navigated, and intuitive. • Materials are organized in course folders - based on topics, weeks of instruction or a similar structure. • A clear "entrance" with an introduction to the course is noted on the main landing page or top-level folder ("Start Here: Introduction"), allowing students to quickly and repeatedly find time-sensitive, organized materials. • For usability and quick access, material should not be nested, generally, more than two levels from the top menu / top-most course level. • Extraneous tools or links are removed from menu.	• Content is structured to be easily navigated, and intuitive. • Materials are organized in course folders - based on topics, weeks of instruction or a similar structure. • A clear "entrance" with an introduction to the course is noted on the main landing page or top-level folder ("Start Here: Introduction"), allowing students to quickly and repeatedly find time-sensitive, organized materials. • For usability and quick access, material should not be nested, generally, more than two levels from the top menu / top-most course level. • Extraneous tools or links are removed from menu.	• Content is structured to be easily navigated, and intuitive. • Materials are organized in course folders - based on topics, weeks of instruction or a similar structure. • A clear "entrance" with an introduction to the course is noted on the main landing page or top-level folder ("Start Here: Introduction"). Students quickly and repeatedly find time-sensitive, organized materials. • For usability and quick access, material should not be nested, generally, more than two levels from the top menu / top-most course level. • Extraneous tools or links are removed from menu. • All course organization and content goes "live" to students at once. • All sequenced content, and full materials for every section of the class, is available. [con't]

Course Design and Accessibility (con't)				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Course Organization (con't)	• The instructor clearly states when additional material from the **fifth week on** will go live.	• More than half of the course organization and content can be seen when class is opened to students. All sequenced content is listed in the course, and full materials (content readings, assessments, assignments) are available for the first **six weeks** of the course. • The instructor clearly states when additional material from the **seventh week on** will go live. • Students can also explore through navigation out of order, if it does not negatively impact learning. Time-gated information serves a specific purpose (such as a high stakes test that cannot be taken too early in the semester).	• Virtually the entire course and its content is available when the class opens. All sequenced content is available to students, but a single assignment or assessment may be added later in the semester, and instructor clearly states when this material will go live in the course. • Students can also explore through navigation out of order, if it does not negatively impact learning. Time-gated information serves a specific purpose (such as a high stakes test that cannot be taken too early in the semester). • Review folders or similar summary materials are available for each section.	• Students can also explore through navigation out of order, if it does not negatively impact learning. Time-gated information serves a specific purpose (such as a high stakes test that cannot be taken too early in the semester). • Review folders or similar summary materials are available for each section.

	Course Design and Accessibility (con't)			
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Course Navigation	• Navigation structure is consistent, using both text and icon information. • Navigation labels are descriptive yet concise (i.e. a section is called "The Circulatory System" vs. "Week 2")	• Navigation structure is consistent, using both text and icon information. • Navigation labels are descriptive yet concise (i.e. "The Circulatory System" vs. "Week 2") • Navigation is chunked into high level sections based on sequence of instruction: there are no unnecessary clicks for learners to access a new topic. (For instance, students do not have to first click "Content" or a generic section before they can access "The Circulatory System" section.)	• Navigation structure is consistent, offering both text and icon information. • Navigation labels are descriptive yet concise (i.e. "The Circulatory System") • Navigation is chunked into high level sections based on sequence of instruction: there are no unnecessary clicks for learners to access a new topic. (For instance, students do not have to first click "Content" or a generic section before they can access "The Circulatory System" section.) • Unless necessary, students have flexibility to move ahead in course navigation.	• Navigation structure is consistent, offering both text and icon information. • Navigation labels are descriptive yet concise (i.e. "The Circulatory System" vs. "Week 2") • Navigation is not only easy, but chunked into high level sections based on sequence of instruction: there are no unnecessary clicks for learners to access a new topic. (For instance, students do not have to first click "Content" or a generic section before they can access "The Circulatory System" section.) • Unless necessary (for instance, high-stakes testing or reflective pacing), students have flexibility to move ahead in course navigation. • An assignment or assessment (such as a scavenger hunt or quiz) gives students the opportunity to navigate around the course; it also allows for technical issues to be noted early in the semester, prior to high-stakes assessments.

		Course Design and Accessibility (con't)		
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Course Syllabus	• The syllabus is provided in Word and PDF format, using the official school or department template; it includes contact information and office hours for the instructor, a brief summary of course goals and objectives, expectations for student work, and due dates.	• The syllabus is provided in Word and PDF format, using the official school or department template; it includes contact information and office hours for the instructor, a brief summary of course goals and objectives, expectations for student work, a calendar with due dates for assignments.	• The syllabus is provided in Word and PDF format, using the official school or department template; it includes contact information and office hours for the instructor, a brief summary of course goals and objectives, expectations for student work, a calendar with due dates for assignments, and a detailed breakdown of assignments.	• The syllabus is provided in Word and PDF format, using the official school or department template; it includes contact information and office hours for the instructor, a brief summary of course goals and objectives, expectations for student work, a calendar with due dates for assignments, and a detailed breakdown of assignments. • Optional materials are available, and clearly marked as "further enrichment" rather than "required" materials.
ADA and Disabilities Information	• There is a link to the school page for students with disabilities. • Text explains that students can request accommodation through the campus ADA officer.	• There is a link to the school page for students with disabilities, as well as a FAQ page. • Text explains that students can request accommodation through the campus ADA officer.	• There is a link to the school page for students with disabilities, as well as a FAQ page, and handbook for students with disabilities. • Text explains that students can request accommodation through the campus ADA officer.	• There is a link to the school page for students with disabilities, as well as a FAQ page, and handbook for students with disabilities. • Text explains how to request accommodation through the campus ADA officer. • There are links to essential functions listings, relating to specific school and/or program.

Course Design and Accessibility (con't)				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Section 508, Accessibility & Usability: **Design and Navigation Cues**	• No design depends on color to convey information (for instance, important text is not just highlighted red, but underlined). • Menu items (such as buttons) can be clearly read; are high contrast. • Learners can complete forms with a keyboard only (using TAB to move through forms). • Content opening in new window or tab is noted ["Opens new window"]. • Flickering, moving, blinking, scrolling or auto-updating items or pages are avoided.	• No design depends on color to convey information (for instance, important text is not just highlighted red, but underlined). • Menu items (such as buttons) can be clearly read and are high contrast. High contrast color palettes improve the ability of learners with visual disabilities, including color-blind users, to engage with your materials. • Learners can complete forms with a keyboard only (using TAB to move through forms). • Content opening in new window or tab is noted ["Opens new window"]. • Flickering, moving, blinking, scrolling or auto-updating items or pages are avoided.	• No design depends on color to convey information (important text is not just highlighted red, but underlined). • Menu items (such as buttons) are clearly read and high contrast. • The entire course design uses a high-contrast color palette, & tested with the WebAIM Color Contrast Checker or a similar tool. High contrast color palettes improve the engagement of learners with visual disabilities. • Learners can complete forms with a keyboard only (using TAB to move through forms). • Content opening in new window or tab is noted ["Opens new window"]. • Flickering, moving, blinking, scrolling or auto-updating items or pages are avoided.	• No design depends on color to convey information (for instance, important text is not just highlighted red, but underlined). • Menu items (such as buttons) can be clearly read and are high contrast; tested with the WebAIM Color Contrast Checker or a similar tool. • The entire course design is based on a high-contrast color palette, & tested with the WebAIM Color Contrast Checker or a similar tool. High contrast color palettes improve the engagement of learners with visual disabilities. • Learners can complete forms with a keyboard only (using TAB to move through forms). • Content opening in new window or tab is noted ["Opens new window"]. • Flickering, moving, blinking, scrolling or auto-updating items or pages are avoided.

Course Design and Accessibility (con't)				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Section 508, Accessibility & Usability: **Text and Labeling**	• Page titles are short and descriptive. • Link and content labels are descriptive (not "Click Here," but "Circulatory System"). • A sans-serif font is chosen for text that will be read at length on-line. (Examples: Tahoma, Futura, Verdana). • When creating a form for use in the learning management system (or as a HTML page), labels ("First name") and not placeholder text in the form (What is your first name?) define the information needed.	• Page titles are short and descriptive. • Link and content labels are descriptive (not "Click Here," but "Circulatory System"). • A sans-serif font is chosen for text that will be read at length on-line. (Examples: Tahoma, Futura, Verdana). • When creating a form for use in the learning management system (or as a HTML page), labels ("First name") and not placeholder text in the form (What is your first name?) define the information needed.	• Page titles are short and descriptive. • Link and content labels are descriptive (not "Click Here," but "Circulatory System"). • A sans-serif font is chosen for text that will be read at length on-line. (Examples: Tahoma, Futura, Verdana). A serif font is chosen for any material that must be printed out and read at length. • When creating a form for use in the learning management system (or as a HTML page), labels ("First name") and not placeholder text in the form (What is your first name?) define the information needed.	• Page titles are short and descriptive. • Link and content labels are descriptive (not "Click Here," but "Circulatory System"). • A sans-serif font is chosen for text that will be read at length on-line. (Examples: Tahoma, Futura, Verdana). A serif font is chosen for any material that must be printed out and read at length. • When creating a form for use in the learning management system (or as a HTML page), labels ("First name") and not placeholder text in the form (What is your first name?) define the information needed.

Course Design and Accessibility (con't)				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Section 508, Accessibility & Usability: **Graphics and Multimedia**	• Alternative or "alt" text is offered for graphics or photos. • Transcripts or captions are provided for course media • No element in the course requires mouse interaction; for instance, a key can be pressed OR the mouse used to interact with embedded multimedia.	• Alternative or "alt" text is offered for graphics or photos. • Transcripts or captions are provided for audio or videos • No multimedia or element in the course requires mouse interaction; for instance, a key can be pressed OR the mouse used to interact with embedded multimedia.	• Alternative or "alt" text is offered for graphics or photos. • Transcripts or captions are provided for audio or videos • No multimedia or element in the course requires mouse interaction; for instance, a key can be pressed OR the mouse used to interact with embedded multimedia.	• Alternative or "alt" text is offered for graphics or photos. • All videos have transcriptions, captions or an alternate, equivalent item is provided for learners who have hearing disabilities. • No multimedia or element in the course requires mouse interaction; for instance, a key can be pressed OR the mouse used to interact with embedded multimedia.
Section 508, Accessibility & Usability: **Word, PowerPoint and other Office documents**	• Word documents are designed with styles (such as headings, subheadings), and alternative text. • Powerpoint documents avoid vertically merged cells, placeholders and text boxes, which cause problems with screen readers for visually impaired users.	• Word documents are designed with styles (such as headings, subheadings), and alternative text. • Powerpoint documents avoid vertically merged cells, placeholders and text boxes, which cause problems with screen readers for visually impaired users.	• Word documents are styled with headings, subheadings, and alternative text. • Powerpoints avoid vertically merged cells, placeholders and text boxes, which cause problems for visually impaired users. • Slideshare.net can convert Powerpoint, and create transcriptions, and be quickly embedded.	• Word documents are designed with styles (such as headings, subheadings), and alternative text. • Powerpoint documents avoid vertically merged cells, placeholders and text boxes, which cause problems with screen readers for visually impaired users. • Powerpoint can be added to Slideshare.net, which generates a transcription for all added materials, and can be quickly embedded into a learning management system like Blackboard.

Course Design and Accessibility (con't)				
Section 508, Accessibility & Usability: <u>**Advanced HTML**</u>			**ADVANCED HTML** • CSS style sheets are available to broaden font variations and colors, but not to designate structural elements like headings, paragraphs, and lists, which are created in HTML or the course management system's content editor. No information is conveyed with CSS formatting only. • Forms are developed (Ex. HTML, Bb, SoftChalk) with prompting text next to controls, and input elements (e.g. checkboxes). • No "hover" states trigger actions, just tangible items, secondary menu selections.	**ADVANCED HTML** • CSS style sheets are available to broaden font variations and colors, but not to designate structural elements like headings, paragraphs, and lists, which are created in HTML or the course management system's content editor. No information is conveyed with CSS formatting only. • Image maps used for the site are client-side; and offer alt-text for areas and the map. • Forms are developed (Ex. HTML, Bb, SoftChalk) with prompting text next to controls, and input elements (e.g. checkboxes). • CSS for positioning and page-wide color controls have been vetted with the CSS disabled to check that no information is lost. • No "hover" states are used to trigger actions, just tangible items or secondary menu selections.

Instructional Design				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Instructional Design	• Student learning outcomes or objectives (SLOs) are specifically connected and consistent with learning activities, practice and assessments. These connections are made clear to students. • Learning activities and information are deployed in a generally consistent manner: content folders contain a similar, basic structure regardless of topic. • Standards and requirements to succeed in assignments, including technical requirements, are available in the location where students are submitting their work, as well as in the syllabus.	• Student learning outcomes or objectives (SLOs) are specifically connected and consistent with learning activities, practice and assessments. These connections are made clear to students. • Learning activities and information are deployed in a generally consistent manner: content folders contain a similar, basic structure regardless of topic. • Standards and requirements to succeed in assignments, including technical requirements, are available in location where students are submitting their work, as well as in the syllabus.	• Student learning outcomes or objectives (SLOs) are specifically connected and consistent with learning activities, practice and assessments. These connections are made clear to students. • Learning activities and information are deployed in a consistent manner: content folders contain a similar, basic structure regardless of topic. • Standards and requirements to succeed, including technical requirements, are available in location where students are submitting their work, as well as in the syllabus. • Learning materials are in diverse formats for different learning preferences. • Previously taught or experiential material is refreshed periodically.	• Student learning outcomes or objectives (SLOs) are specifically connected and consistent with learning activities, practice and assessments. These connections are made clear to students. • Learning activities and information are deployed in a generally consistent manner: content folders contain a similar, basic structure regardless of topic. • Standards and requirements to succeed, including technical requirements, are available in location where students are submitting their work, as well as in the syllabus. • All sections of the course contain multiple format materials, reflecting diverse learning preferences. • Periodically refresh previously taught or experiential material and knowledge. Where possible, suggest how new competencies can be practiced. An assignment could assist students in developing their own review tools, improving their awareness of how they learn.

Learner Support and Resources				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Our Academic Community and its Resources	• The Honor Code is listed. • Academic success and resource pages are linked. • Link to the Student Ombudsman, Advising (including specific advising groups), the Testing Centers, Student Affairs, study rooms information, and Bookstore (including hours and required books). • Parking information includes references for infrequent (e.g. distance learning) visitors, a map of campus, and police escort information. • A department or school can create these resources once, for sharing as common content or in a template for course building.	• The Honor Code is listed. • Academic success and resource pages are linked. • Link to the Student Ombudsman, Advising (including specific advising groups), the Testing Centers, Student Affairs, study rooms information, and Bookstore (including hours and required books). • Parking information includes references for infrequent (e.g. distance learning) visitors, a map of campus, and police escort information. • A department or school can create these resources once, for sharing as common content or in a template for course building.	• The Honor Code is listed. • Academic success and resource pages are linked. • Link to the Student Ombudsman, Advising (including specific advising groups), the Testing Centers, background checks for clinical learning, Student Affairs, study rooms information, and Bookstore (including hours and required books). • Parking information includes references for infrequent (e.g. distance learning) visitors, a map of campus, and police escort information. • A department or school can create these resources once, for sharing as common content or in a template for course building.	• The Honor Code is listed. • Academic success and resource pages are linked. • Links exist to the Ombudsman, recent bulletins and department newsletters, Advising (including specific advising groups), the Testing Center, Student Affairs, Student Government, Student Life, a main student organization page, tutoring and study room info, background check information for clinical learning, and bookstore (including hours and required books.) • Parking information includes references for infrequent (e.g. distance learning) visitors, a map of campus, and police escort information. • A department or school can create these resources once, for sharing as common content or in a template for course building.

Learner Support and Resources (con't)				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
General Academic Resources and Support	• Documents on organizing time, energy (e.g. "Seven Habits of Highly Effective College Students", "How to Prepare for a Test", "Getting Things Done" workflow diagram, etc.)	• Documents on organizing time, energy (e.g. "Seven Habits of Highly Effective College Students", "Test-Taking Tips" "Getting Things Done" workflow diagram, etc.) • Link to third party resources (e.g. GradResources.org; Purdue's Online Writing Lab, or OWL)	• "Test-Taking Tips" or similar document • Documents on organizing time, energy (e.g. "Seven Habits of Highly Effective College Students", "Test Taking Tips", "Getting Things Done" workflow diagram, etc.) • Link to third party resources (e.g. GradResources.org; Purdue's Online Writing Lab, or OWL)	• Documents on organizing time, energy (e.g. "Seven Habits of Highly Effective College Students"; "Test Taking Tips", "Getting Things Done" workflow diagram, etc.) • Link to third party resources (e.g. GradResources.org; Purdue's Online Writing Lab, or OWL) • Additional study resources tailored for the class, field of study, and program.
Student Resources on Health & Wellness	• Provide a link to student health clinic, a Mental Health Crisis telephone line, and Suicide Prevention. • Links should also include specific counseling resources for veterans, and for alcohol and substance abuse.	• Provide a link to student health clinic, a Mental Health Crisis telephone line, and Suicide Prevention. • Links should also include specific counseling resources for veterans; alcohol/drug abuse, ULifeline.org's anonymous survey screening for mental health.	• Provide a link to student health clinic, a Mental Health Crisis telephone line, and Suicide Prevention. • Links should also include specific counseling resources for veterans, alcohol/drug abuse, ULifeline.org's anonymous survey screening for mental health.	• Provide a link to student health clinic, a Mental Health Crisis telephone line, and Suicide Prevention. • Links should also include specific counseling resources for veterans; alcohol/drug abuse, ULifeline.org's anonymous survey screening for mental health. • Helpful wellness and stress management apps can be linked (e.g. Breath2Relax).

Information Literacy				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Library Skills and Resources	• The library website is linked into the course menu. • Any relevant information for using the library off-site is linked prominently in the course for distance learners. • All links to library database resources (articles, ebooks, projects), feature the correct school proxy prefix, which allows the library to track usage of different items, and also maintains agreements with content owners.	• The library website is linked into the course menu. Any relevant information for using the library off-site is linked prominent in the course for distance learners. • There is a content folder or section focusing on library tools and research. This includes the library guide for the relevant school or program, literature and database search instructions, etc. • All links to library database resources (articles, ebooks, projects), feature the correct school proxy prefix, which allows the library to track usage of different items, and also maintains agreements with content owners.	• The library website is linked into the course menu. Any relevant information for using the library off-site is linked prominently in the course for distance learners. • There is a content folder or section focusing on library tools and research. This includes the library guide for the relevant school or program, literature and database search instructions, etc. • All links to library database resources (articles, ebooks, projects), feature the correct school proxy prefix. • Library- or instructor-created media demonstrate use of critical library resources.	• The library website is linked into the course menu. Any relevant information for using the library off-site is linked prominently in the course for distance learners. • There is a content folder or section focusing on library tools and research. This includes the library guide for the relevant school or program, literature and database search instructions, etc. • All links to library database resources (articles, ebooks, projects), feature the correct school proxy prefix. • Library- or instructor-created media demonstrate use of critical library resources. • An assignment can introduce students to library resources and assess their skills: for example, an assignment can require use of DOI (digital object identifiers) in searching databases for articles.

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		Information Literacy (con't)		
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Evidence Based Practice	• If students have not yet been taught EBP in the sequence of their program: a brief assignment can still be used to "scaffold" knowledge that will be learned formally soon. For example, rather than have students develop an entire PICO question, an assignment can opt to have students reflect on Outcomes, or use a pre-written PICO question to begin their research practices. • An assignment that is primarily oriented to early scaffolding can be developed as a group assignment, to allow group reflection.	• Images can be used of major EBP models. • Using Haynes' 5S model (2006), a learning module can require students to use one or two "S" elements: for example, answering a question by checking a summary such as UpToDate, or the National Guideline Clearinghouse, and at least one systematic review (such as a Cochrane, PubMed, or MEDLINE). • The Hierarchy of Evidence model (Melnyk & Fineout-Overholt, 2005), and the PRISMA model can also be used to practice critical analysis of evidence.	• Using Haynes' 5S model, a learning module can require students to use three of the "S" elements: for example, answering a question by checking three different "S" resources: a study, a synopsis, and a systematic review. • The Hierarchy of Evidence model (Melnyk & Fineout-Overholt, 2005), and the PRISMA model can also be used to practice critical analysis of evidence. • If students have not yet been taught EBP in the sequence of their program: an assignment can "scaffold" knowledge, or links can be included to a variety of elements featured on the Hierarchy of Evidence and/or 5S.	• Using Haynes' 5S model, a learning module can require students to use four or all of the "S" elements in answering a question. Other models can also be tested in depth (Hierarchy of Evidence, PRISMA, etc) • Trisha Greenhalgh's *BMJ* articles (or 2015 monograph) on critically assessing papers can be linked as references, or analyzed by students in an assignment. • An assignment requiring a student to develop a critically appraised topic (CAT) can be included in an advanced course, and shared with the class or the program. • If students have not yet been taught EBP in the sequence of their program: an assignment can "scaffold" knowledge that will be learned formally soon. Scaffolding can also begin by simply including links to a variety of elements featured on Hierarchy of Evidence, PRISMA, and/or 5S model

Information Literacy (con't)				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Social Media: **FERPA and HIPAA**	• The school's social media policies are linked from the course. • A statement reminds students that FERPA and HIPAA law precludes their sharing covered material and experiences on social media.	• The school's social media policies are linked from the course. • A statement reminds students that FERPA and HIPAA law precludes their sharing covered material and experiences on social media. • An assignment, discussion or assessment provides a chance for learners to reflect on social media and professionalism.	• The school's social media policies are linked from the course. • A statement reminds students to consider FERPA and HIPAA law when sharing material and experiences on social media. This is coupled with a brief assessment that quizzes students on their understanding of HIPAA, FERPA and social media. • An assignment, discussion or assessment provides a chance for learners to reflect on social media and professionalism. Voicethread or the creation of simple media by learners can add another dimension to reflection process.	• The school's social media policies are linked from the course. • A statement reminds students to consider FERPA and HIPAA law when sharing material and experiences on social media. This is coupled with a brief assessment quizzes students on their understanding of HIPAA, FERPA and social media. • An assignment, discussion or assessment provides a chance for learners to reflect on social media and professionalism. • An assignment may use social media to share (within FERPA and HIPAA controls) cases or learning (for example, #FOAMED posts on an unusual medical case submitted to an aggregate site, or occupational therapy CATs shared on a blog or Facebook group). This may also allow learners to reflect on the experience of getting crowd-sourced feedback on their experience, case, or analysis.

	Information Literacy (con't)			
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Social Media: **Assessing Open Access Resources**	• The content of third-party podcasts, blogs or social media sites used in the course has been analyzed for content and conflict of interest. If time permits, a tool like the Quality Checklists for Health Professions Blogs and Podcasts (Colmers et al, 2015) is used to assess potential issues.	• The content of third-party podcasts, blogs or social media sites used in the course has been analyzed, using a tool like the Quality Checklists for Health Professions Blogs and Podcasts (Colmers et al, 2015). • If course features crowd-sourced information (such as posts tagged with #FOAMED), it features peer review and discussion (such as with the ALiEM blog and its MEDIC series) or is balanced by peer-reviewed information on the same topic (such as a journal article, Cochrane review, etc).	• The content of third-party podcasts, blogs or social media sites is analyzed, using a tool like the Quality Checklists for Health Professions Blogs and Podcasts. • If course features crowd-sourced information (such as posts tagged with #FOAMED), it features peer review and discussion (e.g. the ALiEM blog and its MEDIC series) or is balanced by peer-reviewed information on the same topic (such as a journal article, Cochrane review, etc). • Discussions or assessments provide an opportunity for students to further reflect on critical assessment of open access resources.	• The content of third-party podcasts, blogs or social media sites used in the course has been analyzed, using a tool like the Quality Checklists for Health Professions Blogs and Podcasts (Colmers et al, 2015). • If course features crowd-sourced health information (such as Twitter or social media posts tagged with #FOAMED), it features peer review and discussion (such as with the ALiEM blog and its MEDIC series) or is balanced by peer-reviewed information on the same topic (such as a journal article, Cochrane review, etc). • Assessments or discussions provide chance to reflect on critical assessment of open access resources, and the development of open access resources for learners and clinicians in their field. For example, third year students can create a series of wiki articles, or podcasts to help first year students in their field.

Information Literacy (con't)				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Copyright, Fair Use, Creative Commons	• All materials and resources are cited to their original source throughout the course, from texts to websites, to multimedia.	• All materials and resources are cited to their original source throughout the course, from texts to websites, to multimedia. Direct links to these sources are provided for web-based materials. • Links are provided that define the difference between public domain material, Creative Commons materials, and fair use of copyrighted material. • A statement reiterates to students that material that is public domain, or Creative Commons-licensed, would still be considered plagiarism if integrated into their work without proper citations.	• All materials and resources cited to their original source throughout the course, from texts to websites, to multimedia. Direct links are provided for web-based sourcess. • Links define the difference between public domain material, Creative Commons materials, and fair use of copyrighted material. • A statement reiterates to students that public domain or Creative Commons-licensed material, would still be considered plagiarism if integrated into their work without proper citations. • A definition of public domain or Creative Commons materials, and fair use, is written for the course, and adds relevant links for the field. [con't]	• All materials and resources are cited to their original source throughout the course, from texts to websites, to multimedia. Direct links are provided for web-based sourcess. • Links define the difference between public domain material, Creative Commons materials, and fair use of copyrighted material. • A statement reiterates to students that material that is public domain, or Creative Commons-licensed, would still be considered plagiarism if integrated into their work without proper citations. • A definition on the difference between public domain material, Creative Commons materials, and fair use of copyrighted material, is developed for the course, integrated with course or field-specific links and resources. (For example, a definition of Creative Commons is followed by a link to the Creative Commons website, and a relevant Creative Commons-licensed paper in the field from *PLOS-One*). [con't]

Information Literacy (con't)				
<u>**Course Components**</u>	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Copyright, Fair Use, Creative Commons (con't)			• There is an assignment, discussion or other activity allowing students to use Creative Commons-licensed, and/or public domain materials.	• There is an assignment, discussion or other activity allowing students to use Creative Commons-licensed, and/or public domain materials. • There is an assessment, discussion, or other activity to help learners reflect on their understanding of fair use, copyrighted materials, Creative Commons-licensed materials, public domain materials – including its relevance to plagiarism.
Plagiarism	• The school and department policies on plagiarism are provided, along with a definition explaining what plagiarism is.	• The school and department policies on plagiarism are provided, along with a definition explaining what plagiarism is. • Relevant school plagiarism resources are provided.	• The school and department policies on plagiarism are provided, along with a definition. • Relevant school plagiarism resources are provided, along with outside resources that give more context to plagiarism in the broader world. • A sample work showing plagiarism is included to show students how plagiarism can be spotted.	• The school and department policies on plagiarism are provided, along with a definition. • Relevant school/ system plagiarism resources are provided, along with outside resources that give more context to plagiarism in the broader world. • A sample work is included: one version is plagiarized, while the other version shows how the assignment would read with appropriately linked references and in-text citations.

Course Collaboration				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Community Creation & Group Relations	• An icebreaker or similar exercise is offered in a distance learning course, encouraging introductions and questions on the course discussion board. • Discussion topics are open-ended, reflective and avoid "I agree/me too" responses. • A rubric defines participation standards in the class. Rubric includes frequency, type and kind of participation (for example, posting an original, substantive comment to a discussion board weekly, interacting with peers, etc).	• An icebreaker exercise is offered in a distance learning course, encouraging introductions and questions. • Multiple forms of communication are offered in course: eg Voicethread, discussion boards, blogs, etc. • Discussion topics are open-ended, reflective and avoid "I agree/me too" responses. • A rubric defines participation standards in the class. Rubric includes frequency, type and kind of participation (for example, posting an original, substantive comment to a discussion board weekly, interacting with peers, etc).	• An icebreaker or similar exercise is offered in a distance learning course, encouraging introductions and questions. • Multiple forms of communication are offered in course: eg Voicethread, discussion boards, blogs, etc • Discussion topics are open-ended, reflective and avoid "I agree/me too" responses. • A rubric defines participation standards in the class. Rubric includes frequency, type and kind of participation (for example, posting an original, substantive comment to a discussion board weekly, interacting with peers, etc). [con't]	• An icebreaker or similar exercise is offered in a distance learning course, encouraging introductions and questions. An alternative is to pair up students for brief interviews (via Skype, email, etc) and have learners introduce one another in a live, synchronous meeting, or on a message board. • Multiple forms of communication are offered in course: eg Voicethread, discussion boards, blogs, social media. • Discussion topics are open-ended, reflective and avoid "I agree/me too" responses. • A rubric defines participation standards in the class. Rubric includes frequency, type and kind of participation (for example, posting an original, substantive comment to a discussion board weekly, and asking at least one peer a weekly question regarding their post). [con't]

Course Collaboration (con't)				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Community Creation & Group Relations (con't)			• Groups collaborate to create one media object – a video, audio podcast, or simple animation - using a multitude of collaborative and communication tools (a group discussion board, conferencing software, email, Google Docs, etc), sharing the final media product in the course. • Peer critiques for group work include a rubric, specifying participation standards and objectives. Critique scores should be submitted anonymously. If learners are concerned about grading colleagues & friends, it may be helpful to lower impact in final summative grade, allow for lowest peer score to be dropped, and discuss formative assessments with students.	• There are two or more group projects or assessments, including an opportunity to create a media object, with the expectation of using a multitude of collaborative and communication tools (a group discussion board, conferencing software, email, Google Docs, etc). • Peer critiques for group work include a rubric, specifying participation standards and objectives. Critique scores are submitted anonymously. If learners are concerned about grading colleagues/friends, it may be helpful to lower impact in final summative grade, allow for lowest peer score to be dropped, and discuss formative assessments with students.

Professionalism and Community Practice				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
IPE			• A role play group exercise or discussion offers learners the opportunity to discuss methods of resolving a scenario from different professional backgrounds. • Media shared within the online course helps learners consider the roles and expectations of other health care professionals. For example, learners can watch or listen to media (for example, a video on "delivering bad news") then discuss how their focus might change if they were responding from a different professional perspective.	• A role play group exercise or discussion offers learners the opportunity to discuss methods of resolving a scenario from different professional backgrounds. • Media shared within the online course helps learners consider the roles and expectations of other health care professionals. For example, learners can watch or listen to media (for example, a video on "delivering bad news") then discuss how their focus might change if they were responding from a different professional perspective.

	Professionalism and Community Practice			
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Community of Practice			• Define the idea of a community of practice and how this may exist in the learners' subsequent field of interest (or fields of interest: for instance, the larger sphere of physical therapy, versus the more specialized fields of sports medicine, or PT work in competitive sports). • Instructor can also describe how this environment can be facilitated in hybrid or distance learning scenarios, as well as online communities, and share methods where professionals are able to participate in a larger, networked community of practice.	• Define the idea of a community of practice and how this may exist in the learners' subsequent field of interest (or fields of interest: for instance, the larger sphere of physical therapy, versus the more specialized fields of sports medicine or competitive sports). • Instructor can also describe how this environment can be facilitated in hybrid or distance learning scenarios, as well as strictly online communities, and share methods where professionals are able to participate in a larger, networked community of practice. • The instructor can create an assessment or discussion point where learners can share examples of existing communities of practice, and also define the online or offline community elements that can come together to create a community of practice.

		Professionalism and Community Practice		
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Student Self-Reflection and Metacognition	• A self-assessment is available for learners, regarding their readiness for online learning. • Students have the opportunity to discuss cases online. • Reflective questions are modeled by the instructor during posts, and responses to learner comments, over discussion boards, blogs and other media used within the course.	• A self-assessment is available for learners, regarding their readiness for online learning. • Through an assignment, discussion, or group project, learners have a chance to describe and define their learning goals, and form a basic plan to achieve these goals. • Learners have the opportunity to discuss cases online, and discuss general concepts and trends that tie these cases together. • Reflective questions are written to assist with readings; they are also modeled by the instructor during posts, and responses to learner comments, over discussion boards, blogs and other course media.	• A self-assessment is available for learners, regarding their readiness for online learning. • A reflective assignment, discussion, and/or learner contract identifies move from didactic, feedback-rich learning, to learner-defined goals gained during a clinical rotation. Learners further describe, define their learning goals, and form a basic plan to achieve these goals. • Learners discuss cases, and related general concepts & trends. • Reflective questions are written to assist with readings, and posted by instructor during posts and responses to learner comments, over discussion boards, blogs and other course media.	• A self-assessment is available for learners, regarding their readiness for online learning. • A reflective assignment, discussion, and/or learner contract identifies move from didactic, feedback-rich learning, to learner-defined goals gained during a clinical rotation. Learners further describe and define their learning goals, and form a basic plan to achieve these goals. • Learners have the opportunity to discuss cases, and general concepts and trends tying cases together. • Reflective questions are written to assist with readings, and posted by instructor during posts and responses to learner comments, over discussion boards, blogs and other course media. • Assignments spur "reflection on action," with multiple opportunities to reflect: notes, journals, personal or group wiki entries, learners' question and objective development.

Professionalism and Community Practice				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Student Self-Reflection and Metacognition (con't)			• Assignments spur "reflection on action," with many opportunities: notes, journals, personal or group wiki entries, learners' question and objective development. • A clinical skill checklist or inventory is created to facilitate awareness and design of learners' own goals. This inventory can also be used to assess competency. One method is to adapt the Clinical Skills Inventory (Alguire, et al., 2008). • Media shared within the course can be used for reflection: learners could use online journals to reflect on podcasts narrated by ePatients, and their theoretical responses as clinicians. • Ask students to elaborate on "muddiest points" of course, and learning.	• A clinical skill checklist or inventory is created to facilitate awareness and design of learners' own goals. This inventory can also be used to assess competency. One method is to adapt the Clinical Skills Inventory (Alguire, et al., 2008). • RIME (Pangaro, 1999) can help clinical learners to self-assess: for instance, through journals on RIME roles & practices. Example: journal questions probe learners' data collection during rotation. • Media shared within the course can be used for reflection: learners reflect on podcasts narrated by ePatients, and their theoretical responses as clinicians. • Ask students to elaborate on "muddiest points" of course, and learning. • Emphasizing FERPA/HIPAA concerns, an assignment can practice narrative ethnography: for instance, using Voicethread to share a story about clinical experiences. (Quirk, 2006).

Professionalism and Community Practice				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
HIPAA & FERPA	• Links appear to HHS.gov's Health Information Privacy and HIPAA website, and the Department of Education's FERPA summary.	• Links appear to HHS.gov's Health Information Privacy and HIPAA website, and the Department of Education's FERPA summary, as well as the "FERPA and HIPAA" FAQ appearing on HHS.gov.	• Links appear to HHS.gov's Health Information Privacy and HIPAA website, and the Department of Education's FERPA summary, as well as the "FERPA and HIPAA" FAQ appearing on HHS.gov.	• Links appear to HHS.gov's Health Information Privacy and HIPAA website, and the Department of Education's FERPA summary, as well as the "FERPA and HIPAA" FAQ appearing on HHS.gov.
Professionalism	• Links exist to the School's Professionalism page, the school Honor Pledge website, or a definition of professionalism by the school, if applicable. • Links are also provided to a Fraud and Abuse Hotline, a bullying/Reporting Disrespectful Behavior guide, and to a Student Ambassador Society, if one exists. .	• Links exist to the School's Professionalism page, the school Honor Pledge website, or a definition of professionalism by the school, if applicable. • Links are also provided to a Fraud and Abuse Hotline, a bullying/Reporting Disrespectful Behavior guide, and to a Student Ambassador Society, if one exists.	• Links exist to the School's Professionalism page, the school Honor Pledge website, or a definition of professionalism by the school, if applicable. • Links are also provided to a Fraud and Abuse Hotline, a bullying/Reporting Disrespectful Behavior guide, and to a Student Ambassador Society, if one exists.	• Links exist to the School's Professionalism page, the school Honor Pledge website, or a definition of professionalism by the school, if applicable. • Links are also provided to a Fraud and Abuse Hotline, a bullying/Reporting Disrespectful Behavior guide, and to a Student Ambassador Society, if one exists.

Assessment				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
General Assessments	• Faculty provides a template and rubric to assist with a challenging assignment	• Faculty provides a template and rubric to assist with a challenging assignment • As students work towards a competency, exercises should enable opportunities for feedback, and clearly be differentiated from regular evaluation (Gruppen, 2015). Test and quizzes can follow with group feedback, helping assist with corrections. • A one minute paper format can be used as a sort of qualitative "pop quiz" that measures where students' current level of knowledge is, prior to a challenging section in the course.	• Faculty provides a 'sketched out' sample document and rubric to assist with a challenging assignment • As students work towards a competency, exercises should enable opportunities for feedback, and clearly be differentiated from regular evaluation (Gruppen, 2015). Test and quizzes can follow with group feedback, helping assist with corrections. • A one minute paper format can be used as a sort of qualitative "pop quiz" that measures where students' current level of knowledge is, prior to a challenging section in the course.	• Faculty provides a 'sketched out' sample document and rubric to assist with a challenging assignment • Past student samples are provided that represent excellent work. • As students work towards a competency, exercises should enable opportunities for feedback, and clearly be differentiated from regular evaluation (Gruppen, 2015). Tests and quizzes provide feedback for the group and individually on the correct answers, as well as readings and other resources on the topic to help students fix mistakes. • A one minute paper format, or a pre-test/post-test can be used as a sort of qualitative "pop quiz" that measures where students' current level of knowledge is, prior to a challenging section in the course. • For medical and clinical faculty, assessments can tap ACGME's (2000) Toolbox of Assessment Methods, and the ACGME/ABMS Joint Initiative study rating the best methods of evaluation.

Assessment				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Group Work	• Group assignments are provided with a rubric (such as the Interpersonal Skills Rubric by Griffin and Novotny, 2006) that specifies expectations for the group, and for specific roles in the group.	• Group assignments are provided with a rubric (such as the Interpersonal Skills Rubric by Griffin and Novotny, 2006) that specifies expectations for the group, and for specific roles in the group. • A group assessment tool (such as the Peer Evaluation Form for Group Work produced by the Eberly Center at Carnegie Mellon), is provided to help rate the actions of team members.	• Group assignments are provided with a rubric (such as the Interpersonal Skills Rubric by Griffin and Novotny, 2006) that specifies expectations for the group, and for specific roles in the group. • A group assessment tool (such as the Peer Evaluation Form for Group Work produced by the Eberly Center at Carnegie Mellon), is provided to help rate the actions of team members.	• Group assignments are provided with a rubric (such as the Interpersonal Skills Rubric by Griffin and Novotny, 2006) that specifies expectations for the group, and for specific roles in the group. • A group assessment tool (such as the Peer Evaluation Form for Group Work produced by the Eberly Center at Carnegie Mellon), is provided to help rate the actions of team members. • This tool, or scaffolding that leads to consideration of the tool ratings, is provided prior to the assessment, group project or experience.
Role Play			• In an online discussion board, or through the use of Groups in a LMS, learners can be assigned roles that alternate between patient/client, or members of a team working together.	• In an online discussion board, or through the use of Groups in a LMS, learners can be assigned roles that alternate between patient/client, or members of a team working together. • A team can also run through a more formal modeling exercise (such as the POSE model in Quirk, 2006).

		Assessment		
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Portfolios			• Portfolio use is planned in advance not only as a summative or formative tool, but to meet a model format (Webb, 2002): many health science e-portfolios are best served by the carefully shaped "cake mix" or "spinal column" models. • All portfolios have clear instructions, guidelines for materials, and grading criteria. • A formative learning portfolio can be made available for self-reflection, with assessments developed to match a rubric or other structure (for example, the REFLECT Rubric by Wald, et al, 2012).	• Portfolio use is planned in advance not only as a summative or formative tool, but to meet a model format (Webb, 2002): many health science e-portfolios are best served by the carefully shaped "cake mix" or "spinal column" models. • All portfolios have clear instructions, guidelines for materials, and grading criteria. Criteria for portfolios can include compensatory or conjunctive scoring, or use a global or analytic rubric, and can use both qualitative and quantitative measurement. • A formative learning portfolio can be made available for self-reflection, with assessments developed to match a rubric or other structure (for example, the REFLECT Rubric by Wald, et al, 2012). • If portfolio will be formative, and become summative, these uses will be structured separately in the portfolio design (Tekian & Yudkowsky, 2009).

	Assessment			
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Portfolios (con't)				• Where appropriate, assignments in the class can flow directly into pre-defined portfolio sections. • If designed for easy access on mobile devices, portfolios that include knowledge from core didactic classes and problem cases can have a second life as a "toolkit," a clinical reference for reflecting in action. Mnemonics, graphics, and reflections can be saved in the portfolio, then downloaded to the learner's phone or mobile device as a HTML or Google Docs-based reference. • Since collecting and reflecting on difficult clinical experiences in an advanced portfolio can prompt stressful feelings among learners (Buckley, Coleman and Khan, 2010), certain sections of the portfolio protect the privacy of learners, so that difficult reflections are accessible to instructors and not the full cohort of a course or program.

Assessment				
Course Components	**Basic / Updated Autumn - 1**	**Core Summer - 2**	**Accomplished Spring - 3**	**Best Practice Winter - 4**
Advanced Portfolios				• Specific competencies in the portfolio are matched to a structured list of competencies, such as elements from AAMC's Clinical Skills Curriculum, ACGME's Competencies or Milestones Project. Expectations for competencies are described for learners in detail. • Scaffolding assignments can also be used to develop students' use of the illness scripts concept (Schmidt et al, 1990); for example, after a PICO question assignment, students can repurpose their knowledge by turning items into a script. As scripts are developed they can be stored in a private portfolio, to improve recency and serve as a reference for a clinical rotation.

Media and Technologies				
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Technology Literacy	• Necessary technologies are defined in the course, along with resources that can help students with support	• Necessary technologies are defined in the course, along with resources that can help students with support	• Necessary technologies are defined in the course, along with resources that can help students with support, including a technical orientation.	• Necessary technologies are defined in the course, along with resources that can help students with support, and an assignment that helps students scaffold the skills they need to operate tech.
Videos	• Videos and animations are designed with knowledge of the redundancy, modality, and segmenting principles of multimedia (Mayer, 2005; AAMC Institute for Improving Medical Education, 2007). Media is chunked into smaller pieces; visuals or animation paired with narration. • Videos should not feature lots of visual text (Mayer and Moreno, 2003), but have on/off captions or a transcription available for accessibility purposes.	• Videos and animations are designed with knowledge of the redundancy, modality, and segmenting principles of multimedia (Mayer, 2005; AAMC Institute for Improving Medical Education, 2007). Media is chunked into smaller running time pieces; visuals or animation are paired with aural narration. • Videos should not feature lots of visual text (Mayer and Moreno, 2003), but have on/off captions or a transcription available for accessibility purposes.	• Videos and animations are designed with knowledge of the redundancy, modality, and segmenting principles of multimedia (Mayer, 2005; AAMC Institute for Improving Medical Education, 2007). Media is chunked into smaller running time pieces; visuals or animation are paired with aural narration. • Videos should not feature lots of visual text (Mayer and Moreno, 2003), but have on/off captions or a transcription available for accessibility purposes.	• Videos and animations are designed with knowledge of the redundancy, modality, and segmenting principles of multimedia (Mayer, 2005; AAMC Institute for Improving Medical Education, 2007). Media is chunked into smaller running time pieces; visuals or animation are paired with aural narration. • Videos should not feature lots of visual text (Mayer and Moreno, 2003), but have on/off captions or a transcription available for accessibility purposes.

		Media and Technologies		
Course Components	**Basic / Updated** **Autumn - 1**	**Core** **Summer - 2**	**Accomplished** **Spring - 3**	**Best Practice** **Winter - 4**
Tech Support	• The email, telephone number and website for department(s) providing tech support is listed. (Multiple departments may support different platforms.) • There's a link to the learning management system's technical support FAQ and how-to pages, both those provided by the school, where possible, and by the vendor itself (for example, Blackboard's corporate Help page).	• The email, telephone number and website for department(s) providing tech support is listed. (Multiple departments may support different platforms.) • There's a link to the learning management system's technical support FAQ and how-to pages, both those provided by the school, where possible, and by the vendor itself (for example, Blackboard's corporate Help page).	• The email, telephone number and website for department(s) providing tech support is listed. (Multiple departments may support different platforms.) • There's a link to the learning management system's technical support FAQ and how-to pages, both those provided by the school, where possible, and by the vendor itself (for example, Blackboard's corporate Help page).	• The email, telephone number and website for department(s) providing tech support is listed. (Multiple departments may support different platforms.) • There's a link to the learning management system's technical support FAQ and how-to pages, both those provided by the school, where possible, and by the vendor itself (for example, Blackboard's corporate Help page).

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