

Guidelines for Online Teaching and Design

GUIDELINES FOR ONLINE TEACHING AND DESIGN

TEACHINGSUPPORT@UMN.EDU AND FACULTY DEVELOPMENT FOR
ONLINE TEACHING TASK GROUP



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Invitation to provide feedback on the Guidelines for Online Teaching and Design

The Guidelines have been collaboratively developed over a period of two years, and have received extensive feedback from a number of individuals, including faculty members, instructional designers, academic technologists, librarians, disabilities resources, media services and copyright specialists, and various administrators. We would value your feedback [in this survey](#) in regards to the following questions:

- Is anything unclear or confusing or difficult?
- To what extent is it easy to follow?
- Is there anything missing or needs more information?
- Do you have feedback on the usability of this resource?
- Is there anything we have overlooked from the point of view of your campus/college/program?
- Where would you expect to find a resource like this?
- Would you want help introducing this resource to your college or faculty?

We hope this will be a useful resource that benefits instructors and students across the UM system, and we value and appreciate your or your colleagues' feedback.

Thank you!

Introduction

The *Guidelines for Online Teaching and Design* is a resource that assists members of the University community (e.g., faculty, instructors, administrators, instructional designers) in supporting student learning in online courses and programs. The *Guidelines* cover a range of topics and resources critical to providing an effective learner-centered online experience.

The *Guidelines* are meant to strike a balance between providing both constructive guidance and adequate flexibility for units that develop online learning courses and programs. They were developed in response to a 2017 charge from Executive Vice President and Provost Karen Hanson. This document does not need to be read from start to finish. Please use the chapter headings to navigate to the sections that are most relevant and useful to you.

The *Guidelines* draw on existing guidelines used nationwide and at benchmark universities, seminal articles in the literature, the U of M policy library, and expertise from throughout the U of M community. Where guidelines relate to University policy, we link to related documentation. Feedback on the *Guidelines* has been provided by faculty, administrators, academic technologists, and educational developers from across the University of Minnesota system. Additional feedback, questions, and suggestions about the *Guidelines* are welcomed and encouraged; please send your suggestions/questions via this [survey](#) or via the [TeachingSupport](#) form. The *Guidelines* will be reviewed annually for accuracy and improvements.

“Online teaching” can include a variety of course delivery types (e.g. fully online, hybrid, blended or face-to-face); in other words, the *Guidelines for Online Teaching and Design* are relevant whenever a course integrates online elements (e.g., Canvas) into teaching and learning.

PART I

EFFECTIVE ONLINE LEARNING

Effective online learning at the University of Minnesota is a learner-centered experience characterized by the thoughtful design and facilitation of student-to-student, student-to-content, student-to-instructor, and student-to-technology interaction ¹. It is achieved through effective practices in learning design, learning environment design, and online teaching and the facilitation of online learning ^{2,3}.

Effective online learning at the University of Minnesota is a learner-centered experience where goals, assessments, and activities are aligned to support the course objectives. Instructors and instructional designers promote successful achievement of the learning objectives by providing multiple opportunities for students to interact with each other, with the course materials, and with the instructor. Learners encounter frequent opportunities for reflection, self-assessment, and peer learning.

Effective online learning at the University of Minnesota occurs in learning environments that facilitate active learning experiences. Appropriate resources and technologies are used to communicate in a clear and timely manner with students. Multiple instructional methods and strategies guide students to construct knowledge, demonstrate knowledge, and interact within the course. Course websites and learning materials are current, timely, accessible, easy to navigate and provide a clear path for learners to engage with the materials toward their own success.

Effective online learning at the University of Minnesota is facilitated by instructors who are able to effectively implement online pedagogies and ways to cultivate an engaged community of learners who are invested in their own and each other's success ⁴.

Effective online instructors are able to design an online learning environment that facilitates higher-order

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1. Moore, Michael. (1989). Three Types of Interaction. *American Journal of Distance Education*, 3. 1-7. 10.1080/08923648909526659.
 2. Bickle, M.C., Rucker, R. D., & Burnsed, K. A. (2019). Online learning: examination of attributes that promote student satisfaction. *Online Journal of Distance Learning Administration*, 22(1).
 3. Mayer, R. E. (2019). Thirty years of research on online learning. *Applied Cognitive Psychology*, 33(2), 152-159. doi:10.1002/acp.3482
 4. Kumar, S., Martin, F., Budhrani, K., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Elements of award-winning courses. *Online Learning*, 23(4), 160-180. doi:10.24059/olj.v23i4.2077

learning through a process involving critical discourse and reflection in an online community of peers. Three elements facilitate this online community ⁵.

1. Social: In addition to facilitating polite and friendly interaction, participants will feel a sense of belonging and social connection, open communication, and strong group cohesion.
2. Cognitive: Learning materials and content are most effective when used in support of a relevant problem, and used to guide students through investigation and resolution of the problems. This “practical inquiry” process includes ample opportunity for discussion, collaborative problem-solving, and reflection.
3. Teacher: The active presence of the online teacher is critical to the success of the first two elements. Online, it becomes even more imperative for the teacher to act as a learning guide. This includes providing concise instructions, setting clear expectations, creating a consistent online course site, and modeling effective online behaviors and participation ⁶.

The role of an online teacher incorporates all three of the above elements ^{7 8}.

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5. Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. *The Internet and Higher Education*, 2(2-3), 87-105.
 6. Kyei-Blankson, L., Ntuli, E., & Donnelly, H. (2016). Establishing the Importance of Interaction and Presence to Student Learning in Online Environments. *World Journal of Educational Research*, 3(1), 48. doi: 10.22158/wjer.v3n1p48
 7. Dunlap, J. C., & Lowenthal, P. R. (2018). Online Educators' Recommendations for Teaching Online: Crowdsourcing in Action. *Open Praxis*, 10(1), 79-89.
 8. Cung, B., Xu, D., & Eichhorn, S. (2018). Increasing interpersonal interactions in an online course: Does increased instructor email activity and voluntary meeting time in a physical classroom facilitate student learning? *Online Learning*, 22(3), 193-215. doi:10.24059/olj.v22i3.1322

1.

ACADEMIC UNIT RESPONSIBILITY FOR ONLINE TEACHING GUIDELINES

It is recommended that academic units choose quality assurance guidelines to ensure the quality of their online programming. The academic unit may choose from among several frameworks (e.g., [Quality Matters](#), [Online Learning Consortium](#), [UMN Learning Design and Online Teaching Effective Practices](#)) or may develop their own. In the end, academic units are responsible for the adoption and use of guidelines.

If academic units develop their own guidelines, it is recommended that guidelines are thoroughly researched and evidenced-based, not overly prescriptive, and cover areas such as:

- Online course design
- Effective online engagement and teaching strategies
- Accessibility and user experience
- Course technology selection and usage

If you would like free professional consultation as part of your quality assurance process, contact the University of Minnesota's [TeachingSupport](#) via email at TeachingSupport@umn.edu.

2.

CONTINUOUS COURSE IMPROVEMENT

In any instructional experience, it's important to evaluate and adjust course elements based on what is working effectively for student learning. This process is referred to as continuous improvement ¹.

Courses should be periodically reviewed based on the agreed-upon guidelines to ensure high-quality online courses. Guidelines developed or chosen by an academic unit should be reviewed periodically by members of its community (e.g., faculty, administrators, instructional designers) to help ensure the best possible online program and course quality.

There are a number of methods you can use to review your online course:

- Before your course has started:
 - Consult with an [instructional designer or academic technologist from your college](#).
 - Utilize TeachingSupport via the [Get Help Now! Link](#) or email TeachingSupport@umn.edu
- While the course is running:
 - [Review learning analytics \(Canvas\)](#)
 - Collect students' feedback via periodic surveys
 - Ask students to let you know when they find parts of the course confusing or incorrect (e.g., links, directions, course site navigation, etc.)
- After the course has ended:
 - [Review learning analytics \(Canvas\)](#)
 - Conduct a post-class survey of student learning (e.g., [Transparency in Learning and Teaching \(TILT\) in Higher Education Project Pre-Survey and End-of-Term Survey Questions](#))
 - Student rating of teaching (e.g., [Using your students evaluations](#))
 - Apply course quality assurance standards to your online materials.

1. Shattuck, K, Zimmerman, W. A. & Adair, D. (2014). Continuous Improvement of the QM Rubric and Review Processes: Scholarship of Integration and Application. Internet Learning: Vol. 3: Iss. 1, Article 5.

Additional Resources

- [Ensuring Online Course Quality \(CEI, UMN\)](#)
- [The Check – Guide to Online Course Design](#) – UMN College of Education and Human Development
- [Student Feedback on Quality Matters Standards for Online Course Design \(2017, Educause\)](#)
- [Continuously Improving Online Course Design using the Plan-Do-Study-Act Cycle \(2015, Journal of Online Learning and Teaching\)](#)
- [Quality Matters Higher Education Rubric](#) – UMN membership licensed centrally
- [Online Learning Consortium Course Review Scorecard](#)
- [Learning Design and Online Teaching Effective Practice](#)

3.

QUICKSTART CHECKLIST

Considerable thought and design are invested in effective online teaching and learning.

For a quick overview and “checklist” of practices to consider as you begin teaching and facilitating online learning, see the [Learning Design and Online Teaching Effective Practice](#) framework.

The *Guidelines for Online Teaching* flesh out the concepts in this framework.

PART II

LEARNING DESIGN EFFECTIVE PRACTICE

This section describes how to create an online learning centered experience where goals, assessments, and activities are in alignment.

4.

ALIGNMENT

Alignment in Objectives

Alignment in your online course can mean many things. Of course, you want to ensure that your course objectives align with your module objectives. You also want to be sure that course content, learning activities and assessments align with your objectives. A periodic review (with a peer or instructional designer) of your objectives, content, activities, and assessments is especially important in the online environment where clarity of communication is so essential. For more information see the [Carnegie Mellon University guidelines for writing effective learning objectives](#).

Alignment in Terminology

For communication clarity, check your terminology for consistency across every page and activity in your course. Do your assignments have the same title in the syllabus, schedule, discussion, and assignments? Do your assignment directions have the same general language and headers throughout? For example, does your “Reflection 1” assignment called the same name (versus “Self-Reflection 1”, etc.) across each of the following documents in your course site? Checking for alignment in terminology can enhance effective online communication and instruction.

Syllabus	Schedule	Assignment directions	Weekly modules	Communication to class
Reflection 1	Reflection 1	Reflection 1	Reflection 1	Reflection 1

Additional Resources

- [Analyzing Online Course Design](#) (5:24 minutes) Sara Schoen. (2019). UMN Academic Technology Support Services (ATSS).

5.

ONLINE SYLLABUS

Your online syllabus helps establish a framework for the rest of your course. We have included ideas about information design as well as suggested wording for standard sections of your syllabus.

Information design

In an online environment, the syllabus should be readily available and designed for periodic consultation, ensuring that students have quick and easy access to the information they need. One way to do this is to segment important course information into multiple documents, e.g., course syllabus, class schedule, assignment guidelines, and in the course modules themselves. For example:

- A course syllabus may include a course overview, description, instructor information, grade information, policies, and administrative procedures.
- A separate class schedule may provide at-a-glance topics, assignments, and due dates to help keep students on task.
- Class resources and activities may appear in the course modules/site itself.

In addition to increasing the findability of course information, this practice also reduces the redundancies of maintaining information appearing in multiple places.

Sample Online Syllabi

Your syllabus should include at a minimum the following:

- Course description, beginning and ending course dates, required class or online meeting dates, assessment and grading information (college/university grade scales), assignment titles (points and percentages), relevant college and university policies.

Following are a few sample syllabi used in hybrid/online courses.

- [Sample Syllabus 1](#)
- [Sample Syllabus 2](#)

6.

STUDENT SUPPORT

The U of M provides many resources to support students who are studying online. As an instructor, feel free to share these resources below with your students.

Examples of support are the following:

Technical Support

The University of Minnesota provides [technology support](#) for all technologies that are centrally licensed, including email and the course management system. Students on all campuses can access this support 24/7 on all campuses, by email, phone chat and in person campus tech stops. Adding a statement like the one below in your syllabus can help students understand where to go for technical support.

Example: Technical Support Statement

Technical Support

Students are responsible for accessing technological resources necessary for successful completion of academic responsibilities and assignments. The University of Minnesota provides technical resources in computer labs and tech stops across the campus. Tech support is available in person, through online chat, email, phone and text services. IT Help is available 24/7 seven days a week. The [UMN IT Help website](#) provides information for all campuses about support resources. Visit the website or email them at help@umn.edu.

Support for Academic Success

You may want to add information about Academic Support Centers at the University of Minnesota to your syllabus.

- [Academic Success Center: Crookston](#)
- [Academic Support Center: Duluth](#)
- [Office of Academic Success: Morris](#)
- [Student Services: Rochester](#)
- [Academic Success Center: Twin Cities](#)

These centers share a common goal of supporting student success. Services include peer tutoring, writing support, research support, and success skill-building. Several support centers provide online services that help strengthen subject comprehension, build learning skills, and provide an opportunity for one-to-one academic support for online students.

Adding a statement like the one below to your syllabus can help students tap into available support resources on your campus.

Example: Student Services and Resources Statement

Student Services and Resources

The University of Minnesota [Academic Success Services](#) offer a range of excellent resources. Please contact the [Center for Writing](#), or the [Libraries](#) for assistance with research and writing skills.

7.

UNIVERSITY-RECOMMENDED POLICY STATEMENTS

The University's [syllabus policy](#) provides an overview of what should be included in your syllabus. This policy (and related appendix [Recommended Policy Statements for Syllabi](#)) include requirements such as course goals and policy statements. Note that the syllabus policy states that instructors may copy the syllabus language, link out to it, or write their own language, as long as their syllabus addresses those nine policy topics.

8.

SYNCHRONOUS OR ASYNCHRONOUS SESSIONS

Some online or blended courses include a mix of synchronous and asynchronous experiences, where students are expected to attend scheduled online meetings. These online meetings may be used to conduct class sessions, office hours, group work, or other instructional needs.

For example, some instructors choose to conduct online student hours (aka office hours – the virtual equivalent of coming to meet you in your office, but using an online meeting platform instead); some choose to conduct synchronous group question-and-answer sessions.

Regardless of what you choose to do, make it clear in your syllabus exactly how you will conduct these sessions and how students are to sign up. If you offer online or in-person student hours (aka office hours), indicate those details as well. All required online session dates/times should be included in [OneStop](#) registration information.

Make sure your syllabus clearly communicates the expectations (dates/times) for any synchronous online meetings.

Online meetings may be *synchronous* or *asynchronous*:

- In a *synchronous* session, you will conduct the session at a pre-specified date and time, using an online meeting tool.
- In an *asynchronous* session, students can ask questions on their own time and you can respond on your own time, using tools such as email or an online discussion board.

Below are options for how you could conduct online office hours or Q&A sessions for your courses. Choose the option that best meets your needs.

Synchronous Online Sessions

In a synchronous session, you will conduct the session at a pre-specified date and time, using an online meeting tool (see [University-offered online videoconferencing options](#)). One benefit of synchronous sessions is that all participants are online together at the same time, which may increase a feeling of presence, immediacy,

and community in your online classroom. However, synchronous sessions require scheduling in advance. If synchronous online sessions are required, meeting dates should be included in [OneStop](#) registration information before students begin to register for the semester. Or, you should note the fact that synchronous sessions are part of the course requirements and then plan to be as inclusive as possible of student schedules, e.g., poll students for their availability and schedule sessions based on that data. Many students take online courses because of the flexibility and convenience, and we should alert them early if the course requires them to meet at a predetermined time.

Synchronous Online Meeting Tools

The University of Minnesota offers [multiple online meeting and video conferencing tools](#) which offer the ability to meet with one or more students at a time, in real-time. Note that some tools are not available for some members of the Health Sciences area without a requested exception, and some students might be blocked from using online meeting tools in their work environment (for example health sciences professionals in hospitals, clinics).

Scheduled vs. Ad hoc Sessions

You may decide to implement a sign-up sheet for online office hours using the integrated [Canvas appointment scheduling tool](#), [Google Calendar appointment slots](#), or an accessible, formatted table in a Canvas page with student edit access. Some instructors also simply provide a general hyperlink to their personal [Zoom](#) virtual room and have it open for a specified and regularly recurring amount of time. That way, students can enter the virtual room on a first-come, first-served basis, and you can change the settings so the room is blocked until you finish with one student. To meet with a group of students, you can simply leave the room open (rather than blocked). You will be notified when another student is waiting to speak with you.

Time Zones

Because students and teaching staff may be in different time zones, make sure to specify what time zone you are in, and provide instructions for how to use the online meeting tool that you will use.

Facilitating Synchronous Class Sessions

Before meeting online with your students, become comfortable facilitating a synchronous class session and troubleshoot potential technical issues. Consider scheduling a practice or low stakes initial session with

students, the sole purpose of which is to work out the technical issues and ensure everyone is familiar with the tools prior to conducting sessions in which content is discussed. If possible, it may be helpful to designate an online meeting moderator (a colleague, a TA, or a student) who can monitor the online meeting space while you focus on facilitating the conversation.

For more information, see [Teach Online Class Sessions with Zoom](#).

Asynchronous Online Sessions

In an asynchronous session, students can ask questions on their own time and you can respond on your own time, using tools such as email or an online discussion board. The benefits of flexibility, searchability and archivability are at the expense of immediacy and students being able to see and interact with you in real time. You might create a dedicated “Ask the instructor” discussion board, and in the directions indicate when you plan to respond (e.g., within 24 hours, Monday through Friday) to manage student expectations for response time.

9.

WEEKLY COURSE REQUIREMENTS

Indicate what day of the week new information will be posted, what days students are expected to participate in online discussions, and due dates of recurring weekly activities. Articulating the expectations for each week helps ensure student success because it makes explicit expectations for participation and helps the student develop a regular pattern of engagement in the course.

How to budget time for this course

Your syllabus language should describe your expectations for student participation, e.g., include a statement such as, “Students are expected to log in to the course site at least 3 times a week to check announcements, access course content and participate in assigned activities.” Stating your expectations clearly helps students be successful in your course.

To help students manage their workload and expectations, provide them with guidance on how much time they should expect to allot per week toward your course.

The University’s [Instructional Time per Course Credit](#) policy outlines the amount of instructional time required for a specified number of course credits. Instructional time is the amount of time/effort instructors spend engaging directly with students in courses. Determining instructional time in an online course may be challenging because, unlike in onground classes, there is typically not a synchronous class session that everyone must attend at the same time; instructional time must be determined in other ways.

Example

In your syllabus or course introduction, you may communicate expectations for online student and faculty participation:

For this 3-credit course, you will spend approximately 9 hours per week on class content and activities. I will spend at least 3 hours per week engaging you with [overview videos, assignment

and discussion facilitation and feedback]. [This course will also involve two scheduled, synchronous class sessions, which will be part of your contact with me for those weeks].

Note: Per the [Expected Student Academic Work per Credit policy \(section B\)](#), requirements for graduate school courses exceed the three-hours-per-credit-per-week rule, so the example above would need to be revised for graduate courses.

10.

HANDLING TECHNOLOGY-RELATED EXCUSES

Your online course is conducted in a learning management system (e.g., Canvas), and students will need a minimum set of digital skills, an Internet connection, and a working device in order to complete the course requirements. You can preempt technology-related excuses by sharing your policy regarding them.

Example

Your syllabus language might include:

“Technology-related excuses: not accepted! An online course does not necessarily mean a “from home” course. If your personal computer does not have the necessary capabilities or if you experience connection difficulties, you must find alternative computer resources. That your computer or Internet wasn’t working are not acceptable excuses for missed assignments or deadlines. Here are the locations of [campus computer labs](#).”

11.

COMMUNICATION

In an online environment, some students may have expectations for turnaround time on their questions and assignments that you as an instructor may find unrealistic. Ensure that everyone has the same set of expectations by placing a guideline in your syllabus that specifies both how you would like to be communicated with (some instructors prefer direct emails, while some prefer the Inbox tool in Canvas, which allows you to organize all student communications in one spot), and the timeframe by which you (or your TA) commit to getting back to them.

Consider creating a workflow in which you return communication on individual student questions (e.g., within 48 hours) and that you return feedback on shorter assignments (e.g., within 7 days of the due date). In the case of larger assignments (e.g., final projects), longer turnaround time may be needed; in such cases, let students know when to expect completion.

Some considerations regarding how your students will communicate with you and with the teaching staff include:

- When a student contacts the instructor via email, what are some formatting or procedural guidelines? For example, should the student always indicate the class and section in their email? Should they also copy (cc:) your TA? (Note: if you have students communicate with you via Canvas, Canvas will capture their course number and section automatically.)
- Do you prefer students to post class questions in a “Class Questions” discussion forum instead of individual messaging? (Note: this practice can save you time in having to answer the same question individually multiple times.)
- When will you check emails? Are you available on the weekend?
- What role will the TA have in communication (if applicable)?

Canvas provides multiple ways for you to communicate with students, such as [Announcements](#), [Discussions](#), [Inbox/Conversations](#). All of these are governed by individual users’ [Notification settings](#). For more information on the technical skills required to use these Canvas features, see <http://it.umn.edu/canvas>.

12.

COURSE SCHEDULE

For an online course, a course schedule will include a sense of the overall course arc (Units, Modules, Lessons) and the major assignment due dates, but not all weekly details and module content. Instead, include details of readings and assignments in the course site pages so that you only have to maintain those details in one place. Avoid adding dates anywhere in the course site except the schedule and the assignment settings. This will make future updates easier and avoid conflicting date information in the course site.

The following are 2 sample course schedules that might be used as stand-alone documents separate from the course syllabus to keep students on track and aware of dates, topics, and upcoming assignments.

- [Sample Course Schedule 1](#)
- [Sample Course Schedule 2](#)

13.

ASSESSMENTS AND GRADING

Assessments and Grading

Create an overall assessment plan that sequences a variety of assessment types over the duration of the course.

Consider how you can help guide students' learning by providing smaller, low stakes "practice" assignments (formative assessments) to help students prepare for the larger, high stakes (summative) assessments. [What is the difference between formative and summative assessment? \(Eberly Center, Carnegie Mellon\)](#). For a list of both formative and summative online activities, see the [Online Activity Index from the Illinois Online Network](#).

Once you have created your overall assessment plan, clearly indicate how grades will be distributed among the assessments. Indicate how students will receive feedback for their work; options include self-assessment, peer- assessment, or instructor-assessment. Consider using a bit of each option.

Ensure your grading and feedback plan and any accompanying policies are included in your syllabus.

Assignment Guidelines

For any online assignment, students must read all details and instructions on their own, without the benefit of you being present to guide them in real-time about expectations and examples. It can be more difficult for them to seek or get help on even simple questions about how to complete an assignment.

Consider using a [transparent assignment framework](#) to structure your assignment details and better support students' ability to complete the work for your online course. This means providing ¹:

- Overview
 - Introduce the assignment task and relate it to the recent course concepts and ideas.
- Purpose
 - Indicate why are we doing this assignment: What do we hope to practice or learn as a result of this activity?

1. Winkelmes, M.A. (n.d.). TILT Higher Ed. Retrieved from <https://tilthighered.com/>.

- Include learning goals or objectives for the assignment.
- Detailed Instructions
 - Be very explicit and outline each specific step or requirement.
 - Have a student review your instructions to make sure you aren't missing any critical steps.
- Assessment Criteria
 - Include a rubric or other clearly articulated evaluation plan (ideally provided to students before they submit the assignment).
 - Clearly indicate your policy for accepting late assignments.
 - Indicate how and when students will be provided with feedback.

Sample Assignment Guidelines

The following are 2 sample guidelines to help you envision what you might include in your own guidelines.

- [Sample Presentation Assignment Guideline](#)
- [Sample Discussion Assignment Guideline](#)

Facilitating effective assignments in Canvas will require the ability to perform functions such as setting up the Canvas gradebook and managing grades, managing student assignment submissions, and uploading grades to PeopleSoft. More information and training on these technical skills can be found at <http://it.umn.edu/canvas>.

14.

DESIGNING A COURSE MODULE

Include Variety in Materials and Activities

When considering online learning environments we want to provide a variety of instructional materials, activities, and assessments in order to help keep students engaged. Choose a variety of materials, such as videos, journal articles, podcasts, professional and/or current events websites, or textbooks. As well, choose a variety of activities and assessments, such as short self-graded quizzes, collaborative problem solving, discussions, or group projects.

When choosing a variety of online materials, providing clear expectations and time estimates will help students manage their overall workload.

Estimating the Appropriate Amount of Work

Online, it can be hard to estimate the amount of work we are assigning. A student credit work hour is calculated at [3 hours of work per week per credit](#). You can use this to estimate the amount of time a student might spend on a particular learning activity. As instructors and content experts, we often underestimate the time needed to complete content review and activity completion. It's helpful to have a novice learner review one module within your course site and provide feedback on the time needed to complete the content ¹.

Consider writing a weekly unit or module overview page that includes a breakdown of all the component activities for that week.

Example

1. Ritchey, Kristin (11/18/2019). Scaffolding: How the chicken who crossed the road developed new knowledge. Teaching and Learning. Faculty Focus.

Weekly Module Overview

Activities to complete this week:

1. Watch this week's overview video – 10 min
2. Read, annotate and discuss this week's core text – 120 min
3. Connect with your learning partner and schedule your first synchronous meeting together – 10 min
4. Complete the Anonymity on the Web lesson – 90 min
5. Learn how to write accessible hyperlinks and complete the practice exercise – 30 min
6. Complete your podcast discussion post for this week – time varies, 60-90 min
7. Complete your reflection journal for this week – 20 min

Obviously, it's not possible to provide an exact time, so we should be clear to students that we're offering guidelines for how they should spend their time, rather than a limit. Students read at different speeds. The density of the material, the level of language proficiency, familiarity with the topic, and learning differences all contribute to how quickly a student is able to navigate and complete a task. Overall, we want to make sure we are offering an appropriate amount of work per week for students to achieve the learning outcomes in our courses, as well as a guideline to help them plan their weekly participation in the course.

It's easy to calculate estimates for watching or listening to time-based media like TED Talks and podcasts—just include the run time of the media. Estimating time needed to complete other instructional activities may be more challenging. Here are a few resources that might help:

- College of Liberal Arts has created a helpful resource for CLA instructors, including a table that calculates [instructional time versus expected student work time for academic credit](#). Please use this resource if it is helpful for your college or context.
- You can use a tool like the [Read-o-Meter](#) to estimate reading speeds for written text. (it assumes a reading speed of 225 words per minute, which is on the lower end of average reading speeds.)
- See also this [Course Load Estimator](#) (Rice University) for help calculating how long students might spend preparing posts and responses in discussion forums and other types of assignments.
- [Time Equivalencies for Instructional Activities](#) (Penn State)
- [UMN Policy | Expected Student Academic Work Per Credit](#)

Library Course Reserves

The University of Minnesota Libraries offer a course reserves service which allows instructors and TAs to place items on on-site or online reserve for courses they are teaching. Reserve staff will work with instructors to provide access for any kind of physical or digital media they require including materials not currently owned by the Libraries. Your reserves can be accessed through your course's [Canvas](#) page by clicking on the **Library Course Page** on the left-hand column of your course's Canvas page.

Using the Library Course Pages helps students find readings quickly and efficiently in one location. You may submit a request for this on the Course Reserves page (see campus library links below). Your Course Reserves list may be formatted in weekly, content, or alphabetical format. The Course Reserves list materials can include library articles, videos, digital textbooks licensed by the libraries and small sections of other texts scanned in to digital format.

- [Canvas: Enabling Course Reserves guide](#)
- [Duluth: Course Reserves for Faculty](#)
- [Morris: Arranging for Course Reserves](#)
- [Twin Cities and Rochester: Course Reserves](#)
- [Crookston Library](#) does not offer course reserves at this time.

15.

STUDENT AND TECHNOLOGY PRIVACY

[Educause](#) recently announced that student privacy is the third most important issue for Information Technology (IT) in 2019 ¹. The [Quality Matters](#) standards for online course design state that learners should be provided with information on protecting their data and privacy (Standard 6.4) for all technologies.

You could address student privacy issues by including short descriptions in your syllabus or assignment guidelines and/or links to longer descriptions of privacy statements for any technologies you use.

Examples

You might add a statement such as the following to your syllabus:

Student Privacy

In this class, our use of technology will make student names visible within the course website, but only to other students in the same class. The University uses Canvas; a secure, password-protected course website. If you are required to use any tool external to Canvas for learning activities or assignment completion, a link or description of privacy policies will be included in the directions provided in the course site.

You can add statements such as the following for each external technology used to your syllabus or assignment guidelines:

VoiceThread and Privacy

Your VoiceThread presentations are only shared through the course site and not publicly published on the VoiceThread website based on directions and settings provided. Please do

1. Caines, A., & Glass, E. (2019, October 14). Education before Regulation: Empowering Students to Question Their Data Privacy. Retrieved from <https://er.educause.edu/articles/2019/10/education-before-regulation-empowering-students-to-question-their-data-privacy>

not share presentation links with others outside the class. VoiceThread is centrally licensed by the University of Minnesota. VoiceThread is a signatory to the Student Privacy Pledge, a set of principles intended to safeguard student privacy, including responsible stewardship, protection, and transparent handling of student personal information. For more information read the [VoiceThread Privacy Policy](#) statement.

For additional tools, see these [Privacy/Accessibility Statements](#) that can be added to the syllabus or assignment guidelines.

PART III

LEARNING ENVIRONMENT EFFECTIVE PRACTICE

This section outlines how you might create a learning environment that facilitates a learner-centered approach using appropriate resources and technologies.

FACILITATING STUDENT ENGAGEMENT

Because it takes place in a virtual environment, the effective design of online engagement should address factors that are taken for granted in onground classrooms, mostly surrounding the facilitation of student engagement toward a satisfying and connected experience where the student feels like a part of an online community of learners.

An effective online community of learners will include authentic problem-solving activities that are explored by learners through collaborative projects, critical discussion, and reflective activities ². As well, student interaction may be facilitated in a number of different ways, including ³:

“The learning community in an online course allows for mutual exploration of ideas, a safe place to reflect on and develop those ideas, and a collaborative, supportive approach to academic work.” ¹

- ***Student to instructor:*** A critical aspect of an optimal online course design and delivery cycle should feature the instructor’s (or a teaching assistant’s) frequent presence in the course in visible ways such as modeling online participation, moderating discussions, monitoring participation and engagement online. You may include synchronous or asynchronous opportunities, as well as online student hours (aka office hours).
- ***Student to students:*** Include multiple opportunities for peers to interact with each other. Meaningful student-student engagement opportunities may include collaborative assignments, discussions, peer sharing and feedback activities.
- ***Student to course learning materials:*** Alignment with course objectives, affordability of materials,

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1. Palloff, R. M., & Pratt, K. (2007). Building online learning communities: effective strategies for the virtual classroom. San Francisco: John Wiley & Sons.
 2. Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. *The Internet and Higher Education*, 2(2-3), 87-105.
 3. Moore, Michael. (1989). Three Types of Interaction. *American Journal of Distance Education*. 3. 1-7. 10.1080/08923648909526659.

and relevance of the learning to students' lives are intrinsically motivational aspects of course design. Ensure that instructional materials contribute to the achievement of the stated course and module/unit learning objectives or competencies and make use of affordable content options when possible (see Affordable Content in this document).

- ***Student to course technologies:*** Employ a variety of relevant technologies to facilitate learning.

To account for multiple learning preferences and to facilitate the development of [digital literacies](#) in online learning and in online collaboration, provide opportunities for engagement and interaction that are varied.

For a list of engaging online activities, see the [Online Activity Index from the Illinois Online Network](#).

Additional Resources

- [Student Engagement](#) (5:32 minutes) Christina Lopez, Annette McNamara, Yelena Yan, Kim Wilcox. (2015). UMN ATSS
- [Building Course Community](#) (5:42 minutes). Christina Lopez, Annette McNamara, Yelena Yan, Kim Wilcox. (2015). UMN ATSS
- [Planning and Facilitating Online Discussions](#) (6:37 minutes) Lauren Marsh. (2016). ATSS

17.

USER EXPERIENCE FOR COURSE WEBSITES

Strive to make sure your course website is simple to navigate and your learning materials are easy to find. You can borrow from the field of web usability—with its emphasis on user experience—to learn how to make language, layout and navigation decisions that will naturally create a more usable experience for your students, which will allow them to focus on learning in your course rather than hunting for content.

These best practices show the type of user experience design thinking that can help you understand how to apply a user experience framework to your course design decisions ¹:

Creating a usable experience in your online course environment also means you'll spend less time answering questions.

- Create a Start Here page or module to orient students to your course site and how you've organized it.
- Maintain consistent language between the course syllabus and course site, i.e., refer to “Capstone paper” always as that and not, additionally, as “Final project”, “Capstone activity”, or etc. (so students don't have to wonder whether you're talking about the same thing).
- Submit a request to library [Course Reserves](#) for links to all library articles which will be easy for your students to access from your online course site. This practice helps the Libraries maintain accurate subscriptions and puts the links at your students' fingertips so they can spend more time reading and less time searching.
- Replace course content as needed to address the current literature on the subject.
- Include your image and contact information in a prominent place either on the main page of your course website or from the Syllabus in the Canvas course navigation, so students know how to get in touch with you.
- Use text headings to break up content and make it easier for students to find the information they're looking for (and make sure you follow [accessible formatting practices](#)).
- Use page templates for standard recurring pages (e.g., assignment sheets and module or unit overview

1. Fandrey, A., & McNamara, A. (August 2015). Web Usability Meets Course Website Usability. University of Wisconsin-Madison Distance Teaching and Learning Conference Proceedings.

- pages), to increase predictability; this helps students learn how to learn from your site.
- Clearly differentiate between required versus optional resources and activities.
 - Write hyperlink text so that it can be understood out of context, e.g., “How to write a hyperlink (PDF)”, rather than “Click here for more information” because links should make sense out of context. (Learn more about [accessible hyperlinks](#).)
 - Include captioned multimedia to give students options for how they will interact with your course materials.
 - Use the [Canvas Link Validator](#) to check external links in your course site each semester and run [UDOIT](#) to test the accessibility of your entire Canvas course site.

Creating a usable experience in your online course environment also will mean you’ll spend less time answering questions such as, “What are we supposed to do this week?” and “Where can I find the readings?” ...which allows you to focus on teaching and interacting with students about content rather than administrative details.

The best practices listed above will require the use of Canvas technical skills, e.g., creating pages and modules, managing files, and utilizing accessibility checkers. For more information and training on these technical skills, see <https://it.umn.edu/technology/canvas>

Additional Resources

- [UC Davis Canvas site on Usability](#) (Canvas module on this topic).

18.

MANDATORY ATTENDANCE AT FIRST CLASS IN ONLINE COURSES

As stated in the [Mandatory Attendance at First Class policy](#) (#3 in the FAQ), it is not sufficient for the student to have simply logged in to the course website in order to be counted as in attendance for the first class. Rather, they must complete an academic-related activity within the first week in order to be allowed to remain enrolled in the course.

For online courses, acceptable indication of attendance means that the course should require (and, by extension, the student must complete), one or more of the following within the first week of class:

- Student submission of an academic assignment
- Student submission of an exam
- Documented student participation in an interactive tutorial or computer-assisted instruction
- A posting by the student showing the student's participation in an online study group that is assigned by the institution
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters
- An email from the student or other documentation showing that the student-initiated contact with a faculty member to ask a question about an academic subject studied in the course.

If the student does not complete at least one Week-1 activity by midnight on Sunday night following the first week of the course and does not communicate their intent to do so, then the instructor may give that seat to another student.

[This language borrows heavily from The [Ohio State University Office of Distance Education and eLearning Resource Center](#) article on attendance in online classes.]

19.

ACADEMIC INTEGRITY

Academic integrity speaks to the student's and instructor's responsibilities for scholarly honesty in all modalities of learning, including online learning. The University's Office for Community Standards has developed guidelines for "[Promoting Academic Integrity in your Course](#)" including:

- Define the appropriate use of resources at the beginning of the course. Restate these expectations as exams and assignments come due.
- Include the recommended syllabus statement regarding scholastic dishonesty.
- Explicitly state expectations for collaboration and group work.
- Change exams routinely and reorder exam questions.
- Proctor exams carefully and closely monitor makeup test arrangements. (The University offers two options for online exam proctoring: Proctorio and ProctorU; see below)
- Discuss the importance of academic integrity with students.

Honor Statements

Consider adding honor statements at the beginning of the quiz or exam or in their syllabus. An example of an honor statement from the University of Minnesota's College of Pharmacy:

Each student is bound by the College of Pharmacy Honor Code, which states, 'Academic misconduct' is any unauthorized act which may give a student an unfair advantage over other students, including but not limited to: falsification, plagiarism, misuse of test materials, receiving unauthorized assistance and giving unauthorized assistance.

Plagiarism Detection

[Turnitin](#) is the centrally licensed plagiarism detection tool for the University, and it is integrated with Canvas. It creates a similarity score that is generated by comparing submitted work to other published material that it has in its databases, giving you an idea of how much material a student may have cited or borrowed from other sources.

Turnitin may be integrated with writing assignments at the point that students submit to Canvas. Note

there is an option in Turnitin which stores submitted writing in a national database (in order to compare writing with other published work). You can turn this option on or off. If it is off, student writing is not stored by the vendor. If you choose to leave this option on, let students know their data will be stored by Turnitin. Storing student papers in Turnitin can cause issues if they plan to publish their papers. When publishers do a search on their papers, the Turnitin database may reference the student assignment as a publication. Students have objected to this setting at other universities, and we recommend you turn it off if you have any concerns.

Remote Proctoring

Remote proctoring helps ensure exam integrity when students are taking online exams. For online proctoring tool options, see OIT's [Exam security](#) web page.

This same page also includes information on various topics that support online exam security such as:

- Requiring students to agree to an honor statement
- Using question sets to randomly generate quizzes or exams for each student.
- Making students aware of Moodle's and Canvas' tracking and logging abilities.

You might also want to consider adding a statement on your quiz, e.g.,

You are required to do your own work on this quiz, and any assistance you receive from another student, or any assistance you give to another student will be considered unauthorized, and subject to penalties to be determined by the Honor Council. By taking this quiz, I certify that I have neither given nor received unauthorized assistance.

For additional information, see the [Teaching and Learning: Instructor and Unit Responsibilities policy](#) which speaks to secure handling of examinations (see part "C" of the policy).

Limitations of Proctoring and Plagiarism Tools

There are known limitations and concerns with both remote proctoring and plagiarism detection tools. For example, TurnItIn may sometimes return a false positive plagiarism score on a student's work who did properly cite their sources. ProctorU has also reportedly missed some issues where cheating-like behavior occurred but was not captured by the tool. Please be aware that technology tools to assist you in ensuring the academic integrity of your course may not be entirely reliable in all cases.

Ethics of Proctoring and Plagiarism Tools

It is recommended that you let students know when your course includes the use of a plagiarism detection tool like TurnItIn and that you yourself are aware of what it does. As mentioned above, if student work is being uploaded to a third-party vendor's servers, students should be made aware that their work is stored on those servers so it can be compared against others' work in order to arrive at the plagiarism score. Consider adjusting tool settings to not upload student papers.

Additional Resources

- Morris, S. M., Stommel, J., Smithers, M., Patenaude, M., Moon, J., Holt, T., ... Loomis, S. (2017, June 16). A Guide for Resisting Edtech: the Case against Turnitin. Retrieved from <http://hybridpedagogy.org/resisting-edtech/>
- Weimer, M. (2015, November 6). Do Online Students Cheat More on Tests? Retrieved February 3, 2020, from <https://www.facultyfocus.com/articles/online-education/do-online-students-cheat-more-on-tests/>

UNIVERSAL DESIGN FOR LEARNING AND ACCESSIBILITY

Accessibility is a federal requirement, not a guideline. However, we include information about accessibility here in order to provide guidance in how to accomplish it in your online course.

University Policies: Originally adopted in 2002 and recently revised, the University's [Accessibility of Information Technology Policy](#) specifies the extent to which accessibility must be a consideration in design and development, procurement, implementation and use of information technology and related resources. In addition, the [Policy on Disability Services](#) provides high-level guidance on U of M attitude toward the development of curricula and educational materials, physical spaces, and products and services to meet the needs of all students, faculty, and staff, "consistent with the concepts of [universal design](#)."

The University of Minnesota serves a diverse population of students, who have different ways of acquiring and expressing knowledge. The University values disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. Both the Americans with Disabilities Act and Section 504 of the Rehabilitation Act prohibit discrimination on the basis of disability. Postsecondary institutions must provide reasonable accommodations for students with disabilities and must strive to make the digital learning environment accessible from the start. Accessibility in online teaching is one significant way to create an inclusive learning environment where all students can contribute and engage in the learning process. Accessibility is vital for the full participation of students with disabilities and broadly benefits all learners.

Instructors should ensure that all content, media, and activities in their class are accessible from the design phase to reduce the lag time that students experience when getting started with the course, as well as the need for retrofitting or last-minute changes. While some online platforms and tools are more or less accessible, instructors must take steps to choose and create materials (e.g. accessible documents), content (e.g. properly captioned videos), and course sites that are designed with accessibility in mind to ensure an accessible end

Universal Design for Learning (UDL) is a set of principles for curriculum development that gives all individuals equal opportunities to learn.¹

1. UDL in Higher Ed. http://udloncampus.cast.org/page/udl_about

product. Therefore, ensuring accessibility is not just the responsibility of one individual, it must be a regular consideration and practice of everyone involved in the development, implementation, and instruction of an online course.

Here are a few ways to make your courses more accessible and inclusive:

- Use Canvas to host your course website.
- Practice the [6 Core Skills](#) outlined on the University's go-to accessibility resource, [AccessibleU](#).
- Create accessible Canvas courses using the U's [Creating Accessible Canvas Courses](#) resource and follow [Canvas's own general accessibility guidelines](#)
- Create and use [accessible documents](#)
- Ensure [accessibility of multimedia](#) that you use or create
- Follow best practices in [universal design](#) in [online instruction](#) and [course design](#)

The UMN has a [Digital Accessibility Badge Program](#) to help you improve how to create emails, slide decks, documents, and more in an accessible way, without using code. In each self-paced online workshop, you will learn skills and apply them to your everyday work. You may choose to take as many workshops as you like. You will receive a digital badge highlighting the skills you demonstrated in the final project for each training.

Responding to Accommodation Letters

The Disabilities Resource Center (DRC) may still contact you when specific accommodations are required for a student enrolled in your course. Some examples of frequent accommodation requests are:

1. additional time needed to complete online exams
2. document conversion (to another format, usually digital)
3. transcripts or captions needed for online media.

You can work with college or central academic technology staff to determine how to make these adjustments or add these resources in your course site.

21.

AFFORDABLE CONTENT

You can ensure a more inclusive online course experience by considering the overall cost of course materials and working to find ways to reduce these costs for students. Consider working with your subject librarian ([Twin Cities](#), [Duluth](#), [Morris](#), [Crookston](#), [Rochester](#)) and the [eLearning Support librarians](#) to explore ways to eliminate the need for expensive textbooks wherever it makes sense in your course, including replacing your expensive publisher textbook with:

- Articles from journals available via subscription at your campus library
- [Open educational resources \(OER\)](#) – resources that are available to read at no charge, and have a [Creative Commons](#) license, which allows them to be remixed for your context
- [Library eBooks](#)
- Customized course materials that combine articles, chapters, eBooks, OER, and more (See [Course Material Solutions For Instructors](#))
- Or a digital textbook from a traditional publisher via an Inclusive Access (all students purchase model) at a greatly reduced price for your students (which still allows students to opt out).

Affordable content planning can go hand-in-hand with the design of your online course. It can also support more diverse and contemporary perspectives and provide all students with the course material from the first day of class, thereby creating a more equitable learning environment ¹.

1. Jensen, K., Nackerud, S., & Joslin, R. A. (2018). *The evolution of affordable content efforts in higher education: programs, case studies, and examples*. Minneapolis, MN: M Libraries. <https://doi.org/10.24926/86666.0101>

COPYRIGHT

Using existing materials in your teaching

Copyright issues will almost certainly arise if you use any existing media (books, articles, videos, etc) in your teaching. In many cases, the copyright issues involved in teaching online are not that different than when teaching in person, but there are a few points of divergence. University of Minnesota instructors have some flexibility in terms of how they handle copyright issues – because it’s reasonable to approach the issues in a few different ways. The University’s Office of General Counsel has affirmed that it is appropriate for instructors to make their own informed assessments about fair use and other copyright issues, as described in the [University of Minnesota Instructors Rights and Responsibilities](#) page.

Below we outline a few different reasonable approaches to copyright issues when using existing materials.

Linking to publicly available materials

The easiest way to share materials with students is to share links, rather than make or distribute copies. Sharing a link to publicly available online content (web pages, online newspapers, online videos, etc) raises few copyright issues and requires no permission. With subscription or paywalled online content, it is usually permissible to share a link that other people may access via their own subscriptions.

Be wary of sharing links with students if the linked content itself seems to be obviously infringing (e.g., a video of a currently-in-theaters feature film that appears to have been recorded inside a movie theater). This can be considered knowing encouragement to infringe. However, if the linked content is not obviously infringing (e.g., a copy of a book chapter apparently shared by the author or publisher), sharing links is usually fine.

Linking via subscription access

For materials to which the University provides subscription access (such as library subscription ebooks, journals, and databases), linking is usually what the subscription contracts permit. Downloading University subscription content and re-uploading it to a course website may violate subscription contracts. It also obscures students’ use of the resource, which may affect ongoing subscription decisions in times of limited budgets. Most campus libraries have services that can help you create durable links – for example, in the Twin

Cities, further information is available at [Course material solutions for instructors](#). For information about durable linking services at other system campuses, see the list of campus libraries contacts below.

Making copies when use is already allowed by law or a license

There are some materials for which copyright is not a barrier to copying and distribution – including materials in which the copyright has ended, or never existed (i.e., items in the [public domain](#)), and those covered by an open license enabling use, such as a [Creative Commons](#) license.

- Many Open Access academic publications provide Creative Commons licenses for all published content. There is not a unified list of all open-licensed academic publications, but the [Directory of Open Access Journals](#), for example, indexes primarily publications that are fully open.
- There are numerous fully-open textbooks – often referred to, along with other open teaching materials, as “Open Educational Resources” (or OER). One catalog of open textbooks is maintained via UMN at the [Open Textbook Library](#).
- Using open licensed materials usually requires attribution with some additional details not commonly included in academic citations – read more about that in the Libraries’ [attribution guidance](#).

There may also be times when a University subscription, such as to a stock image library, directly allows copying and use by students, faculty, and staff. Contact your local communications and/or AT support professionals for more information.

Making a fair use judgment call

Instructors can sometimes make copies for their students without permission, in the physical world or online, via the “fair use” provision of copyright law, which sets out some flexible rules describing where use may be permitted in a number of contexts. Education is one of the contexts where fair use often applies. However, it does require a judgment call every time.

There are a variety of things to think about in determining if a use is a fair use (and no single one is determinative, so you have to think through all of them every time). Some of these considerations may be familiar – they include questions like “how much of the work are you using?” and “what is your purpose in copying this material?” They are outlined in detail at the [Libraries Copyright Services page on fair use](#), and some specific considerations related to image use in teaching, including some guidelines from a variety of scholarly and professional organizations, are at the Libraries Copyright Services page about [Using Images in Teaching \(online and otherwise\)](#).

Other sources of materials

When you can't link to materials, and you don't think it would be fair use to make your own copies without permission, you may still be able to use the materials by seeking permission. Contact your local librarian or academic technologist.

You may also find sometimes that it's more straightforward to locate alternative materials, rather than hash through permission or fair use judgment calls. Library staff members may be able to help instructors identify relevant alternative materials that are openly licensed, or that are in the public domain.

- Copyright services are available on all UMN Campuses to help you determine effective practices in using materials.
- [Crookston copyright services](#)
- [Duluth copyright services](#)
- [Morris copyright services](#)
- [Rochester copyright services](#)
- [Twin Cities copyright services](#)

- Find your Twin Cities subject specialist librarians on the [Subject librarians & department liaisons](#) page
- Duluth subject specialists are listed at their [Librarians by Subject](#) page
- Other UMN campuses have smaller library staffs, but often have considerable subject expertise, which you can reach via each library's main page:
 - [Morris](#)
 - [Crookston](#)
 - [Rochester](#)

Ownership of instructional materials

Under the University policies referenced below, most instructors will own the copyright in instructional materials that they create. However, this is not universally true: the University may own the copyright in what are called “directed works” from anywhere on any campus (i.e., works which an employee is asked to create, and for which they are given resources beyond those normally available to their peers). Contributions from technical or instructional support staff members may also be owned by the University in some cases. On some campuses, and in some schools or departments, there are also broadly applicable local policies and/or terms of employment that specify University ownership of some or all teaching materials.

Student ownership of academic work

As a matter of both law and University policy, students own the copyright in works they create for course assignments, and generally with respect to their involvement at the University, unless they create works as an employee. University policy also dictates that, despite student ownership, instructors can set requirements and expectations for how those students must share or provide access to their works.

University Copyright Policy

Two University policies provide guidance on the specific topic of ownership of works produced at the University (including students' ownership of their course assignments): the [Copyright Ownership policy](#) (and associated links) and the [Board of Regents Copyright policy](#).

If you would like a consultation on copyright-related questions or a workshop in your department on copyright, contact Nancy Sims (nasims@umn.edu) or copyinfo@umn.edu (both with the University Libraries.)

23.

COURSE TECHNOLOGY SELECTION AND USAGE

Select course technologies that 1) provide an accessible user experience (the system is easy it is to use by the most students possible without modification) and 2) enable active learning and engagement with the course content. You can search for directions provided by [UMN IT websites](#).

Selecting centrally-licensed tools that have already been approved by the campus academic technology governance bodies (including those that have been integrated into Canvas) is the best way to ensure these criteria are met.

Non-University Supported Technology Considerations

If you choose to select tools that are not supported by the University, use caution and consider these factors:

- Ensure the technology won't sell student data to other vendors
- Consider whether it requires students to sign up for additional accounts and whether those accounts are secure and private
- Ensure the application is accessible to all students

All Technologies (UMN supported or not)

Course technologies should be chosen in a manner that:

1. aligns with the instructional goal
2. minimizes risks to student data privacy
3. are accessible
4. are reasonably easy to use
5. engages students with learning or accessing course content

For any technology tool you decide to use in your class communicate to students, either in your syllabus or other means:

- Indicate to students why you are using it
- Provide detailed instructions for how to use it
- Include options for technology help should it be needed.
- Access to the tool's privacy statement

Additional Resources

- [Use Technology for Courses](#): Learn about UMN academic technology tools, you can use to create and teach, or learn, with online resources in face-to-face, hybrid, and online courses.

24.

COURSE MEDIA EFFECTIVE PRACTICE

When creating or finding media for your course, consider these best practices for effective use of media:

- **Engaging:** Capture your unique perspectives, insight, experiences with the concepts. Share real life anecdotes and examples; tell stories.
- **Granular:** Pare content down to its essence, in small separate parts.
- **Short:** Keep media to approximately 6 minutes for [Optimal Video Length for Student Engagement](#)
- **Modular:** Cover one core topic at a time.
- **Reusable:** Omit information that is likely to become dated, e.g., elements like book chapters or modules in the course.
- **High Quality:** Make use of a script or outline to guide the presentation.
- **Aligned:** Relate your media back to the course learning objectives/assignments.
- **Sustainable:** Present sustainable topics that are not likely to change over time.

Additional Resources

- [The Reusable, Relevant Recording: Creating Engaging and Evergreen Content](#)
- [Recipes to Create Effective Online Videos Lectures](#) (8:25 minutes) Susan Tade (2019). Academic Technology Support Services (ATSS)
- [Recipes for Online Video Lectures and Active Learning](#)(4:36 minutes) Nima Salehi (2019) School of Nursing.
- [Recipes for Online Teaching: Curated Videos Plus Activities](#) (presentation slides)
- Mishra, P., and Koehler, M.J. (2006) 'Technological pedagogical content knowledge: A framework for integrating technology in teachers' knowledge', Teachers College Record, 108(6), p1017-1054
- Brame, C.J. (2016) 'Effective educational videos: Principles and guidelines for maximizing

student learning from video content', CBE—Life Sciences Education, 15(4), p.es6.

25.

STUDENT CONDUCT

Like onground courses, online courses require students to engage with each other either synchronously or asynchronously, both in individual and team discussions, and sometimes about sensitive material. Explore best practices in creating safe, respectful and inclusive online teaching environments. Students should be reminded that we do not come to our courses with identical backgrounds and experiences, and that building on what we already know about collaborating, listening, and engaging is critical to successful professional, academic, and scientific engagement with topics.

Examples

Sample language may include:

Students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:

- *Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned), and contacting the TA or instructor if scheduling problems cannot be overcome.*
- *Setting clear deadlines and holding yourself and each other accountable.*
- *Determining the roles group members need to fulfill to successfully complete the project on time.*
- *Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)*

In a group discussion, this can mean:

- *Respecting the identities and experiences of your classmates.*
- *Avoiding broad statements and generalizations. Group discussions are another form of*

academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.

- *Considering your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.*

Like other work in the course, all student-to-student communication is covered by the Student Conduct Code.

This guideline borrows heavily from [student engagement and responsible language authored by the Office of E-Learning and Academic Technology](#) in the UMN School of Public Health.

26.

STUDENT READINESS FOR ONLINE LEARNING

Your course design should account for a variety of comfort levels in technology spaces and for a variety of previous experiences with online learning.

Note that online learning requires additional high-level executive function skills, including the ability to:

- Manage time well
- Self-motivate
- Self-regulate learning
- Seek help

You can ensure your online course supports the development of these skills by:

- Providing due dates for every assignment and activity. Enter the due dates into Canvas in the due date field rather than the assignment description, so the assignment appears in the Calendar, Module, and Syllabus view.
- Providing clear, scaffolded instructions for every assignment, especially major projects.
- Prompting reflection on assignments, readings and activities. You can help students develop a metacognitive habit of regulating their own learning by building reflection into your assignment instructions.

PART IV

ONLINE TEACHING EFFECTIVE PRACTICE

This section includes information about how to facilitate learner engagement with the instructor, other learners, and course content.

ONLINE INSTRUCTOR PRESENCE AND ENGAGEMENT

In an online environment, it takes more intentionality to develop a sense of instructor presence since there are no face-to-face interactions¹. As an online teacher, then, your visible presence while creating and facilitating an effective online community of learners is critical. Consider the following ways to be present, visible, and active in your course^{2 3 4}:

- Consider how you might be present in some way to students each, or nearly each, day:
 - Post weekly announcements or summaries
 - Provide timely feedback
 - Respond to discussion boards
 - Post general responses to groups and/or the whole class.
 - Use video, text or media to create a positive presence
 - If the instructor will be away from the course for an extended period, let students know
- Be present as you create a trusting and collaborative learning environment where all feel invested, safe and motivated to learn.
 - Introduce yourself online
 - Help your students get to know you as a person and an expert
 - Provide opportunities for everyone in the class to talk about personal contexts
 - Ask students to introduce themselves and create individual profiles
- Be present as you guide learners with clear, consistent expectations, feedback, and communication.
 - Set clear expectations for group work and assignments

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1. Stavredes, T. (2011). *Effective online teaching: Foundations and strategies for student success*. San Francisco: Jossey-Bass.
 2. Boettcher, J. V., & Conrad, R.-M. (2016). *The online teaching survival guide: simple and practical pedagogical tips*. San Francisco, CA: Jossey-Bass.
 3. Udermann, B., (June 2019). 7 Strategies to Promote Community in Online Courses. *Faculty Focus*. Higher Ed Teaching & Learning.
 4. Martin, J. (2019). Building relationships and increasing engagement in the virtual classroom: Practical tools for the online instructor. *Journal of Educators Online*, 16(1).

- Include any learning resources required to complete the activity

28.

TEACHING PRACTICES TO CONSIDER IN THE ONLINE ENVIRONMENT

While space does not allow for a comprehensive discussion of online teaching practices, following are several practices to consider^{1 2 3}:

Design

- Rigorously connect content to core concepts and learning outcomes.
- Develop and use a content frame (i.e. overviews, cognitive maps, visual graphics) for your course
- Design experiences to help learners make progress on their novice-to-expert journey
- Allow for student agency by providing opportunities for students to direct their own learning, e.g., multiple content formats, choice of assignment type, self-reflection, student-led discussion, or student-found content.
- Design and facilitate learning tasks and activities that are grounded in authentic problems.
 - Use cases or scenarios to pose problems that engage students' interest and curiosity.
 - Provide opportunities for students to reflect on their learning.
- Select and use content resources that are available in digital format and that are directly supportive of your learning goals.
- To help improve the quality of your learning design, ask learners for informal feedback at multiple points, e.g., early in the term, mid-term, and end of term.

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1. Boettcher, J. V., & Conrad, R.-M. (2016). *The online teaching survival guide: simple and practical pedagogical tips*. San Francisco, CA: Jossey-Bass.
 2. Udermann, B., (June 2019). 7 Strategies to Promote Community in Online Courses. *Faculty Focus*. Higher Ed Teaching & Learning.
 3. Martin, J. (2019). [Building relationships and increasing engagement in the virtual classroom: Practical tools for the online instructor](#). *Journal of Educators Online*, 16(1).

Online presence and community

- Be present in the course site (see section on Instructor presence and engagement in the online environment for examples)
- Create a supportive online course community
- Provide explicit expectations for your learners and yourself as to how you will communicate:
 - Ask learners to post their content-focused questions in a public space on the course site (e.g., a discussion forum) so they can view and answer each others' questions. These queries and responses will benefit all learners.
 - Communicate what your response time (e.g., within 24 hours) to student's questions will be

Online assessments, activities, assignments

- Consider how to achieve the three basic interaction patterns⁴:
 - Faculty to student
 - Create module introductions and mini-lectures via audio podcasts or video
 - Send online announcements that remind, coach, suggest.
 - Interactions with the students (via email, forums, live classroom events)
 - Provide frequent, timely, specific feedback to learners.
 - Student to student
 - Utilize small teams for collaborative problem solving and/or writing projects
 - Peer learning (reviews, evaluations, assessments)
 - Online group discussions (including peer-led)
 - Student to learning resources (content)
 - Indicate how much time students should be working on the course each week.
 - Provide guidance on how to successfully navigate learning resources.
 - Provide links to review and/or advanced level resources.
 - Provide clear, consistent instructions on how to interact with learning resources.
- Use a variety of large group, small group, and individual work activities and assignments
- Include both synchronous and asynchronous activities
- Prepare discussion prompts that invite responses, questions, discussions, and reflections. Suggestions include⁵:

4. Boettcher, J. V., & Conrad, R.-M. (2016). *The online teaching survival guide: simple and practical pedagogical tips*. San Francisco, CA: Jossey-Bass.

5. Boettcher, J. V., & Conrad, R.-M. (2016). *The online teaching survival guide: simple and practical pedagogical tips*. San

- Create open-ended questions for learners to explore and apply the concepts they are learning
- Model Socratic-type probing and follow-up questions:
 - “Why do you think that?”
 - “What is your reasoning?”
 - “Is there an alternative strategy?”
- Ask clarifying questions that encourage students to think about what they know and don’t know
- Plan a good closing and final activity for the course (e.g. student presentations, summaries, and analyses)
- Assess as you go by gathering evidence of learning (formative and summative) at multiple points throughout the course.
- Avoid limiting assessment to papers, exams, and/or a final project (See [Illinois Online Network Online Activity Index](#) for more ideas.)

Whereas the suggestions above are focused on online learning in particular, there may often be overlap between what is considered effective online teaching and what is considered effective teaching in general, regardless of modality. Centers for teaching and learning provide resources on a wide range of teaching and learning topics and strategies that can be adapted to or used in the online environment:

- [Center for Educational Innovation](#) (University of Minnesota)
- [Eberly Center](#) (Carnegie Mellon)
- [Center for Teaching and Learning](#) (Vanderbilt University)

Additional Resources

- Miller, M. D. (2017). [Minds online: teaching effectively with technology](#). Cambridge: Harvard University Press.
- Boettcher, J. V., & Conrad, R.-M. (2016). [The online teaching survival guide: simple and practical pedagogical tips](#). San Francisco, CA: Jossey-Bass.
- Nilson, L. B., & Goodson, L. A. (2018). [Online teaching at its best: a merger of instructional design with teaching](#). John Wiley & Sons.

ESTABLISHING A RESPECTFUL AND INCLUSIVE LEARNING ENVIRONMENT

Feeling a sense of belonging to a valued social group is a basic human need, and a sense of fit and acceptance by others is essential to maintain motivation. These basic human needs must be attended to in online environments because of the increased tendency to feel isolated during an online course. For these reasons, it is suggested to review these guidelines and suggestions for creating an inclusive environment in your online classroom.

The [Association of American Colleges & Universities \(AAC&U\)](#) defines inclusion as “the active, intentional, and ongoing engagement with diversity—in the curriculum, in the co-curriculum, and in communities (intellectual, social, cultural, geographical) with which individuals might connect—in ways that increase awareness, content knowledge, cognitive sophistication, and empathic understanding of the complex ways individuals interact within systems and institutions” (n.d.).

An inclusive online classroom works to establish pedagogical practices, policies, and language use which create learning environments that recognize and support the agencies of all students. This list includes students who identify as one of the more commonly recognized marginalized groups (by race, religion, ethnicity, gender, and sexual orientation), and also those with multiple marginalized identities or who do not fit into the mold of the traditional university student. While not exhaustive, other identities or circumstances might include:

- Commuter students
- International students
- Students with children
- Students serving as caretakers for family members
- Veterans
- Athletes
- Students with unique family structures
- English language learners
- Immigrants
- Students with disabilities, including those related to mental and physical health
- Students with challenging or unique job demands
- Previously or currently incarcerated students
- Students from low socioeconomic status families

- Geographically isolated students
- First-generation higher education students
- People of size

To create a more inclusive online classroom environment, consider these best practices in course design and pedagogy, course policies and processes, and learning materials.

Inclusive Course Design & Pedagogy

- Develop courses with a content team rather than a single author to ensure that multiple perspectives are included and the content is reviewed through multiple inclusive lenses.
- Make inclusive design choices in course content (i.e. use a style sheet for documents, include alt texts for images, caption video, provide transcripts for audio-visual material, etc.)
- Provide clear rubrics to reduce students' worries that their evaluation may be biased due to stereotypes and prejudice. Provide specific examples of exemplary and unsatisfactory work. Remember to get permission from students before using their material as examples.
- On surveys and evaluations, ask questions regarding race, ethnicity, gender, religion, country of origin, etc. only if a clearly defined need exists for this information. Let individuals self-identify in surveys and evaluation questions regarding race, ethnicity, gender, religion, country of origin, etc, when possible, or providing "Other" as an option, if a defined list needs to be included.
- Seek feedback from your students specifically asking questions about inclusiveness and make changes accordingly.
- Add the pronouns you use in multiple places, such as your email signature, Instructor information section of syllabus, and Instructor information section of your course website
- Encourage students to add the pronouns they use to their student record in MyU
- Model inclusive behavior and language as you moderate student discussions.

Inclusive Course Policies & Processes

- Schedule student hours (aka office hours) options during a variety of times, including during the evenings, so students with varied schedules (due to work, family obligations, etc.) also have an opportunity to attend.
- Provide syllabus links to a variety of campus and community student support resources which shows evidence that you recognize the agencies and potential challenges of students.
- Complete bias assessments to better understand personal biases, such as [Harvard University's Implicit Project](#), and regularly consult your course website's learning analytics to ensure that you are providing

equal amounts of feedback to all students and not unwittingly favoring members of a select group.

- Avoiding assumptive language practices, such as “A woman should talk to her boyfriend about STI testing,” which assumes the woman is heterosexual and has only one sexual partner.

Inclusive Learning Materials

- Work with University librarians to explore affordable content options for your course content.
- Select images of photos and video for learning materials that represent diverse people and experiences.
- Use non-binary and person/student-centered language in all learning materials
- Avoid the use of unnecessary colloquialisms in course content to aid English language learners (e.g., “We’re going to ramp up our efforts here...”)
- Use culturally diverse names within course content and lectures, such as subjects in examples and case scenarios.
- Provide examples of diverse experiences in examples and case scenarios
- Choose and cite research that represents a diverse range of researchers and journals, particularly when multiple articles come to the same conclusions.

Note: significant sections of this guideline were taken from the report: [Inclusivity: Universal Design Strategies for the Online Classroom](#) by Sarah Keene and Amy LimBybliw, Rothenberger Institute, University of Minnesota. See [Rothenberger Institute’s Inclusive Language Syllabi Statement](#) for an explanation on the reasoning behind these efforts.

Additional Resources

- The Research Basis for Inclusive Teaching. (n.d.). Retrieved February 3, 2020, from <http://www.crlt.umich.edu/research-basis-inclusive-teaching>
- Moving a Taxonomy of Inclusive Design from Theory to Practice. (n.d.). Retrieved February 3, 2020, from <https://er.educause.edu/blogs/2019/12/moving-a-taxonomy-of-inclusive-design-from-theory-to-practice>

30.

MANAGING ADMINISTRATIVE AND TECHNICAL DETAILS

The University of Minnesota provides support, guides and training for faculty on the managerial and technical aspects of online teaching.

IT Support

IT Help is available 24/7 seven days a week. The [UMN IT Help website](#) provides information for all campuses about phone, email, in person and chat support resources. Visit the website for support contacts or email them at help@umn.edu.

Submitting Grades

Academic Support Resources and IT provide directions on how and when to export grades from Canvas into the PeopleSoft student reports system.

- [Canvas: Send Grades to PeopleSoft](#)
- [Canvas: Export Final Grades for Upload to PeopleSoft guide](#)
- [Due dates for grades](#)

For technical issues downloading the CSV file(s), contact Technology Help (help@umn.edu; 612-301-4357).

For technical issues uploading the CSV files into PeopleSoft, contact Academic Support Resources (ASR) srhelp@umn.edu or call 612-625-2803.

31.

FACULTY DEVELOPMENT FOR ONLINE TEACHING

The importance of the faculty role in helping students learn in an online environment cannot be overstated in terms of supporting effective online programs and courses. It is recommended that instructors engage in some type of faculty development experience prior to designing and teaching an online course. For a list of faculty development resources, see:

If high-quality online courses and programs are a priority for universities, then instructors must be qualified, motivated and satisfied with teaching online.¹

- [Professional Development for Teaching Online](#) (UMN Center for Educational Innovation).
- [Course Re/design and Development](#) (Academic Technology Support Services)
- [Professional Development Resources for Online Teaching](#) (UMN Resources)
- [Resource Directory](#) (UMN units that support online teaching)

Contact teachingsupport@umn.edu for guidance on how to get started for you or your college.

1. Dietrich, D. (2015, February). Why Instructor Satisfaction Cannot be Ignored. Retrieved February 4, 2020, from <https://elearnmag.acm.org/archive.cfm?aid=2735931>

ABOUT

The Guidelines for Online Teaching and Design have been developed by members of [TeachingSupport](#) and the [Faculty Development for Online Teaching \(FDOT\) task group](#). Thank you to those who have contributed time, effort, and expertise to developing these guidelines, including:

- Senenge Andzenge, Center for Educational Innovation
- Ander Buldoc, Disability Resource Center
- Emily Erhlinger, Disability Resource Center
- Ann Fandrey, College of Liberal Arts
- Sarah Keene, Rothenberger Institute
- Jeff Lindgren, Center for Educational Innovation
- Amy LimBybliw, Rothenberger Institute
- Annette McNamara, Office of Information Technology
- Amie Norden, Carlson School of Management
- Debi Race, University of Minnesota Crookston
- Nima Salehi, School of Nursing
- Sara Schoen, Office of Information Technology
- Nancy Sims, Libraries

Thank you also to those who developed the [Learning Design and Online Teaching Effective Practice](#) framework:

- Sara Hurley, School of Public Health
- Annette McNamara, Office of Information Technology
- Christina Petersen, Center for Educational Innovation
- Christiane Reilly, College of Continuing and Professional Studies
- Nima Salehi, School of Nursing

APPENDIX: POLICIES, REGULATIONS AND ACCREDITATION

University policies, federal and state regulations, and accreditation standards are all important considerations for online courses and programs, and information related to these are contained in other documents, as described in this section.

Policies that might impact your teaching

Faculty, staff, and students are required to comply with University policies. For descriptions and links out to the policies that are relevant to online teaching, please see the [University of Minnesota Online Teaching Policies](#) document. By contrast, the Guidelines provide best practices and examples that assist in developing compliant strategies.

Federal & State Regulations for Online Programs

Please see the [University of Minnesota Guide to Federal and State Requirements for Online Programs](#) document for descriptions and links to federal and state requirements for Online programs.

Accreditation

Accreditation bodies, such as the [Higher Learning Commission](#) and various other professional accreditation bodies, have expectations and requirements that are germane to online programs and courses. It is not the purpose of this document to identify the various professional accreditation bodies and their requirements, but simply to raise awareness or provide reminders of their existence and importance.

GLOSSARY

Asynchronous

Asynchronous means that people are interacting online but not all at the same time. Think of a discussion board where you post today and I answer tomorrow. That is an asynchronous online experience.

Synchronous

Synchronous means that everyone is online at the same time.

References

- Ambrose, S., & ProQuest. (2010). [How learning works: Seven research-based principles for smart teaching](#) (1st ed., Jossey-Bass higher and adult education series). San Francisco, Calif.: Jossey-Bass.
- Bickle, M.C., Rucker, R. D., & Burnsed, K. A. (2019). [Online learning: examination of attributes that promote student satisfaction](#). Online Journal of Distance Learning Administration, 22(1).
- Brame
- Boettcher, J. V., & Conrad, R.-M. (2016). The online teaching survival guide: simple and practical pedagogical tips. San Francisco, CA: Jossey-Bass.
- Burgstahler S. (Jan 30, 2017). [ADA Compliance for Online Course Design](#). Educause Review.
- Caines, A., & Glass, E. (2019, October 14). Education before Regulation: Empowering Students to Question Their Data Privacy. Retrieved from <https://er.educause.edu/articles/2019/10/education-before-regulation-empowering-students-to-question-their-data-privacy>
- Cung, B., Xu, D., & Eichhorn, S. (2018). [Increasing interpersonal interactions in an online course: Does increased instructor email activity and voluntary meeting time in a physical classroom facilitate student learning?](#) Online Learning, 22(3), 193-215. doi:10.24059/olj.v22i3.1322
- Darby, F. (April 22, 2019). [How to be a better online teacher](#). The Chronicle of Higher Education.
- Dunlap, J. C., & Lowenthal, P. R. (2018). [Online Educators' Recommendations for Teaching Online: Crowdsourcing in Action](#). Open Praxis, 10(1), 79-89.
- Eberly Center. [Articulate Your Learning Objectives](#). Carnegie Mellon University.
- Fandrey, A., & McNamara, A. (August 2015). [Web Usability Meets Course Website Usability](#). University of Wisconsin-Madison Distance Teaching and Learning Conference Proceedings.
- Garrett, R., & Legon, R. (3/26/2019). [CHLOE 3 Behind the Numbers: The Changing Landscape of Online Education 2019](#). Quality Matters.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). [Critical inquiry in a text-based environment: Computer conferencing in higher education model](#). The Internet and Higher Education, 2(2-3), 87-105.
- Hurley S, McNamara A, Peterson C, Reilly C, Salehi N, Sherven P. (Aug 2, 2017). [Learning Design and Online Teaching Effective Practice](#). Minnesota eLearning Summit Conference Proceedings.
- Higley, M. (January 27, 2018). [Reasons Why Collaborative Online Learning Activities are Effective](#). eLearning Industry. Social Learning.
- Jensen, K., Nackerud, S., & Joslin, R. A. (2018). The evolution of affordable content efforts in higher education: programs, case studies, and examples. Minneapolis, MN: M Libraries.

- Kumar, S., Martin, F., Budhrani, K., & Ritzhaupt, A. (2019). [Award-winning faculty online teaching practices: Elements of award-winning courses](#). *Online Learning*, 23(4), 160-180. doi:10.24059/olj.v23i4.2077
- Kyei-Blankson, L., Ntuli, E., & Donnelly, H. (2016). [Establishing the Importance of Interaction and Presence to Student Learning in Online Environments](#). *World Journal of Educational Research*, 3(1), 48. doi: 10.22158/wjer.v3n1p48
- Martin, J. (2019). [Building relationships and increasing engagement in the virtual classroom: Practical tools for the online instructor](#). *Journal of Educators Online*, 16(1).
- Mayer, R. E. (2019). [Thirty years of research on online learning](#). *Applied Cognitive Psychology*, 33(2), 152-159. doi:10.1002/acp.3482
- Moore, Michael. (1989). Three Types of Interaction. *American Journal of Distance Education*. 3. 1-7. 10.1080/08923648909526659.
- Nilson, L. B., & Goodson, L. A. (2018). *Online Teaching at Its Best: A Merger of Instructional Design with Teaching*. John Wiley & Sons.
- Palenque, M.S. & DeCosta, M. (August 11, 2014). [The Art and Science of Successful Online Discussions](#) Faculty Focus. Magna Publications.
- Ritchey, Kristin (11/18/2019). [Scaffolding: How the chicken who crossed the road developed new knowledge](#). *Teaching and Learning*. Faculty Focus.
- Shattuck, K, Zimmerman, W. A. & Adair, D. (2014). [Continuous Improvement of the QM Rubric and Review Processes: Scholarship of Integration and Application](#). *Internet Learning*: Vol. 3: Iss. 1, Article 5.
- Simunich, B., Robins, D.B. & Kelly, V. (September 18, 2015). [The Impact of Findability on Student Motivation, Self-Efficacy, and Perceptions of Online Course Quality](#). *American Journal of Distance Education*, 29:3, 174-185.
- Stavredes, T. (2011). *Effective online teaching: Foundations and strategies for student success*. San Francisco: Jossey-Bass.
- Udermann, B., (June 2019). [7 Strategies to Promote Community in Online Courses](#). Faculty Focus. Higher Ed Teaching & Learning.
- Vai, M & Sosulski K. (2015) *Essentials of Online Course Design (Essentials of Online Learning)*, 2nd edition Routledge, New York, NY.
- Winkelmess, M.A. (n.d.). TILT Higher Ed. Retrieved from [https://tilthighered.com/.](https://tilthighered.com/))