Moving from Disruption to Online Teaching

Eric Fredericksen, EdD
Associate Vice President for Online Learning
Associate Professor in Educational Leadership

Lisa Brown, EdD
Assistant Director
University IT & URMC Institute for Innovative Education

April 2020

Agenda

- Faculty guest
- Misperceptions about Online Learning
  - Online Learning Research
- Designing instruction
- Online course template
- The Advanced Series in Online Teaching for UR faculty

Our Faculty Guest

James M. Zavislan

- *Associate Professor of Optics*
- *Associate Professor of Biomedical Engineering*
- *Associate Professor of Ophthalmology*
- *Associate Professor, Center for Visual Science*
- *Mercer Brugler Distinguished Teaching Professor 2018-2021*

PhD, University of Rochester, 1988

The Difference Between Emergency Remote Teaching and Online Learning

Emergency Remote Teaching	Online Learning
Quick response, 1 week to launch	Thoughtful, reflection of affordance and constraints, planning, design, development over a semester or two
No time for design, a temporary shift of delivery mode due to a crisis	Careful instructional design and planning, using a systematic model for design and development
Instructor focused, and doing the best they can	Focus on interaction (Student-Instructor, Student-Student, Student-Content) increases learning outcomes
Traditional residential support for community is not available	Focus on Learning Community
No time for foundational experiences	Faculty development includes opportunity to experience student perspective, gain exposure to best practices
Short term course completion, student attitudes, focus on context/inputs/processes	Research on effectiveness, student and faculty experience, outcomes, comparisons to F2F
Consideration of other factors and stresses in life	Inherent flexible approach

Misperceptions

#1 – There are basic and straightforward definitions for a f2f classroom and an online classroom.

A variety of models of “Online” Learning

- Self paced ⇔ cohort based
- Instructor led ⇔instructor-less
- Synchronous ⇔asynchronous
- Open enrollment ⇔semester based
- Non-credit ⇔credit
- Length of semester ⇔ Something less
- A course ⇔complete degree
- Tuition ⇔ Free access

A → Web Enhanced → Blended / Hybrid → Online → B

#2 – Online Learning is an isolating experience for students.

Interaction

- Faculty were more than twice as likely to rate their interaction ***with*** online students as higher than their classroom students.
- Faculty were more than twice as likely to rate interaction ***between*** online students as higher than their classroom students.

Fredericksen, E., Pickett, A., Pelz, W., Swan, K., Shea, P., (2000)

Student responses to online learning

Compared to a traditional class:

- More interaction with faculty and other students
- Higher quality interaction with instructors and other students
- 93% are more likely to ask questions
- 2X as likely to actively participate in discussion
- 2X as likely to ask for clarification
- 83% improved their writing and communication skills
- 80% put more thought into online discussion
- 71% spent more time studying
- 69% more comfortable asking an awkward question

Shea, Fredericksen, et al. 2002

#3 – Online Learning is not as good as the traditional classroom experience.

How does distance education compare with classroom instruction? A meta-analysis of the empirical literature.

- it is clear from the range of effect sizes (-1.31 to +1.41) that some applications of DE are far better than classroom instruction and that some are far worse.
- When achievement outcomes are allocated to modality, synchronous forms (same time videoconferencing) favored classroom instruction ($g=-.1022$, $p<.05$) and asynchronous methods (different time online courses) favored distance education ($g=.0527$, $p<.05$).
- Modest but significant results in favor of distance education in graduate schools.
- When attitude outcomes are investigated, their analysis suggested that the average effect size was significant ($g=-.1846$, $p<.001$) for synchronous distance education but it was not significant for asynchronous distance education.
- With regard to retention, the analysis had a significant effect size ($g=-.0933$, $p<.05$) for asynchronous distance education but not significant for synchronous distance education ($g=.0051$)
- This wide variability means that a substantial number of DE applications provide better achievement results, are viewed more positively, and have higher retention rates than their classroom counterparts. On the other hand, a substantial number of DE applications are far worse than classroom instruction in regard to all three measures.

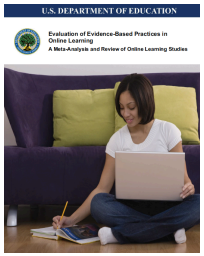
It seems reasonable to conclude that online learning *can* be effective but that is not a guarantee that it *will* be effective

Bernard, et al., (2004)

Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies.

U.S. Department of Education (2010)

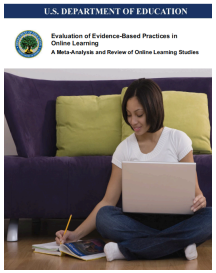
- "The meta-analysis found that, on average, students in online learning conditions performed modestly better than those receiving face to face instruction."
- "Effect sizes were larger for studies in which the online instruction was collaborative or instructor-directed than in those studies where online learners worked independently."
- "Online learning appeared to be an effective option for both undergraduates (mean effect of +0.30, $p<.001$) and for graduate students and professionals (+0.10, $p<.05$) in a wide range of academic and professional studies."
- Nearly all the studies involved formal instruction, with the most common subject matter being medicine or health care.



Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies.

U.S. Department of Education (2010)

- "No significant differences in effectiveness were found that related to the subject of instruction."
- "Studies indicate that manipulations that trigger learner activity or learner reflection and self-monitoring of understanding are effective when students pursue online learning as individuals."
- "The great majority of estimated effect sizes in the meta-analysis are for undergraduate and older students, not elementary or secondary learners."
- (Sitzmann et al. 2006) were even more positive. They found online learning to be superior to classroom-based instruction in terms of declarative knowledge outcomes, with the two being equivalent in terms of procedural learning.
- "These studies found that a tool or feature prompting students to reflect on their learning was effective in improving outcomes."
- **"The overall finding of the meta-analysis is that classes with online learning (whether taught completely online or blended) on average produce stronger student learning outcomes than do classes with solely face-to-face instruction."**



Research on Online Learning

Online Learning

OLJ • THE OFFICIAL JOURNAL OF OLC

HOME ABOUT LOGIN REGISTER CATEGORIES SEARCH CURRENT ARCHIVES ANNOUNCEMENTS OLC

HOME

The Online Learning Consortium's premier journal dedicated to the development and dissemination of new knowledge at the intersection of pedagogy, emerging technology, policy, and practice in online environments. OLJ is indexed in the Web of Science (ESCI).

Vol 24, No 1 (2020)

Full Issue

View or download the full issue PDF ()

Table of Contents

Introduction

OPEN JOURNAL SYSTEMS

JOURNAL CONTENT

Search

Search Scope

All

SEARCH

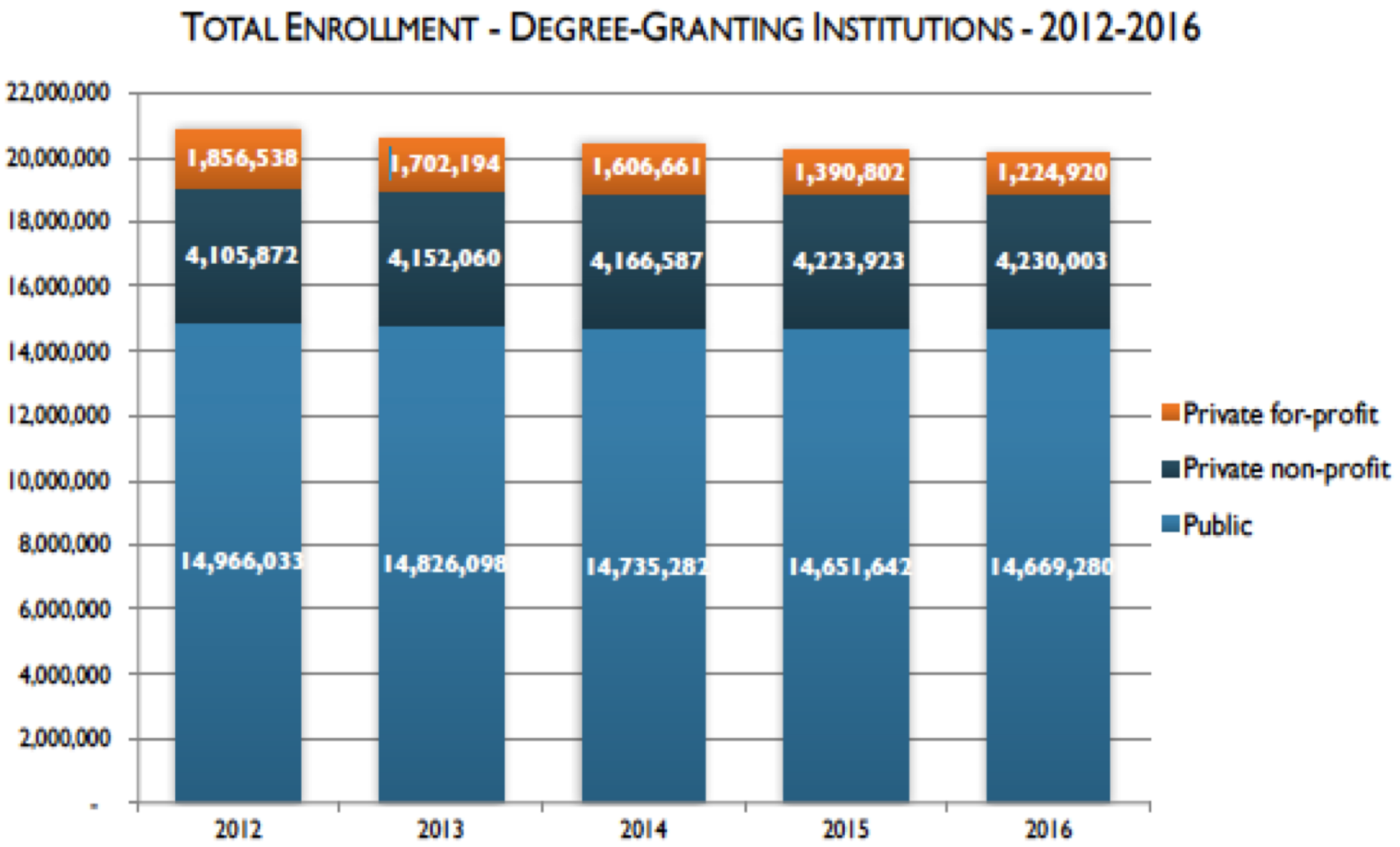
Browse

- BY ISSUE
- BY AUTHOR
- BY TITLE

JOURNAL HELP

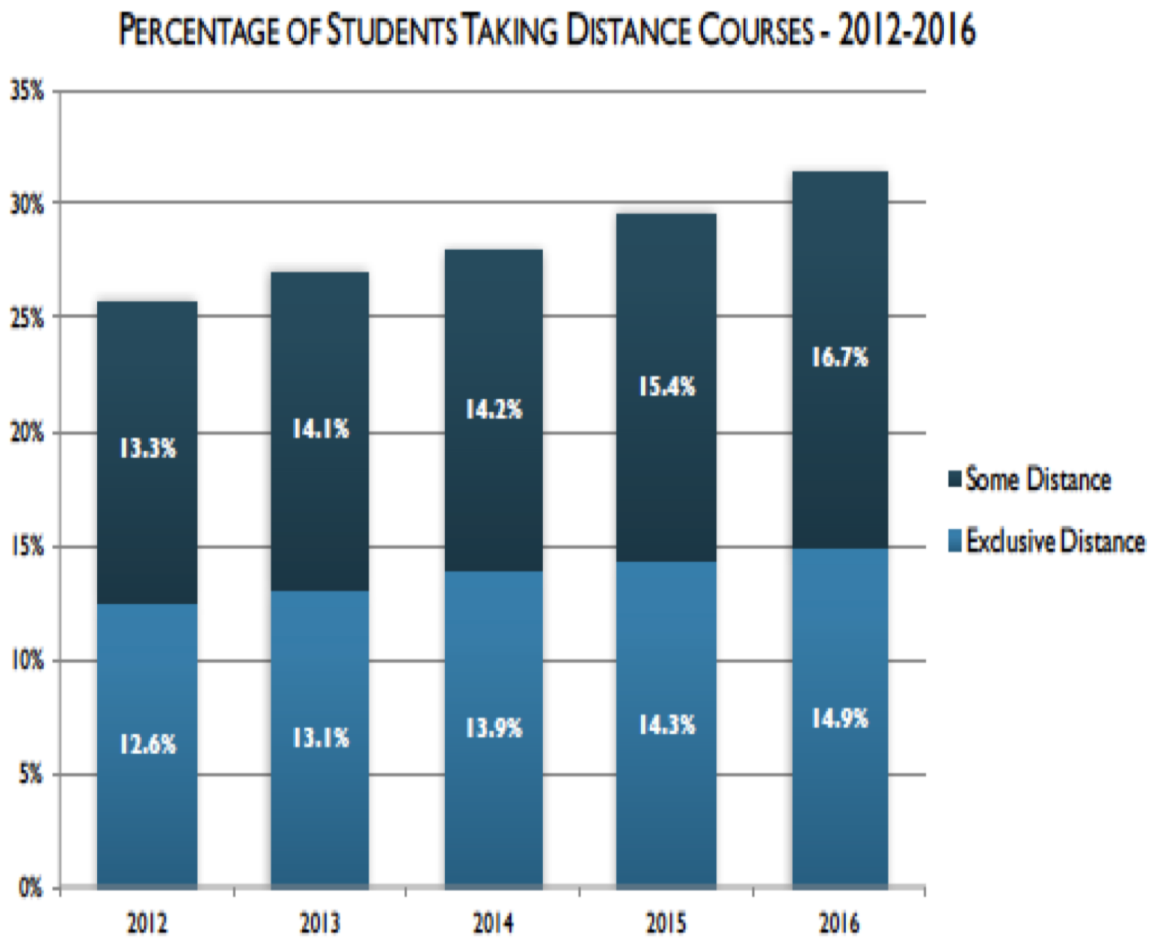
#4 – Online Learning is not a big deal in US Higher Education.

Total Higher Education Enrollments in US



Grade Increase: Tracking Distance Education in the United States, 2018 (Seaman, Allen & Seaman)

Online Education Enrollments in US



Grade Increase: Tracking Distance Education in the United States, 2018 (Seaman, Allen & Seaman)

#5 – Other elite universities are not offering online courses and programs.

HARVARD
UNIVERSITY

CMU
Carnegie
Mellon
University

VANDERBILT UNIVERSITY

CASE
WESTERN
RESERVE
EST. 1826 UNIVERSITY
think beyond the possible

Cornell University

Washington
University in St. Louis

NEW YORK UNIVERSITY

Yale

Northwestern
University

Duke
UNIVERSITY

JOHNS HOPKINS
UNIVERSITY

COLUMBIA UNIVERSITY

UNIVERSITY of ROCHESTER

Instructional Design

So what is “Instructional Design”?

- Strategic planning for a course
- A blueprint
- A clear picture of teaching and learning events
- A system of procedures for developing educational programs in a consistent and reliable fashion
- Creative and iterative
- ➔ Use of systematic design procedures can make instruction more effective, efficient, and relevant…

Understanding by Design
Wiggins & McTighe (1998)

Backwards Design

- Stage 1: Identify desired results
- Stage 2: Determine acceptable evidence
- Stage 3: Plan learning experiences and instruction

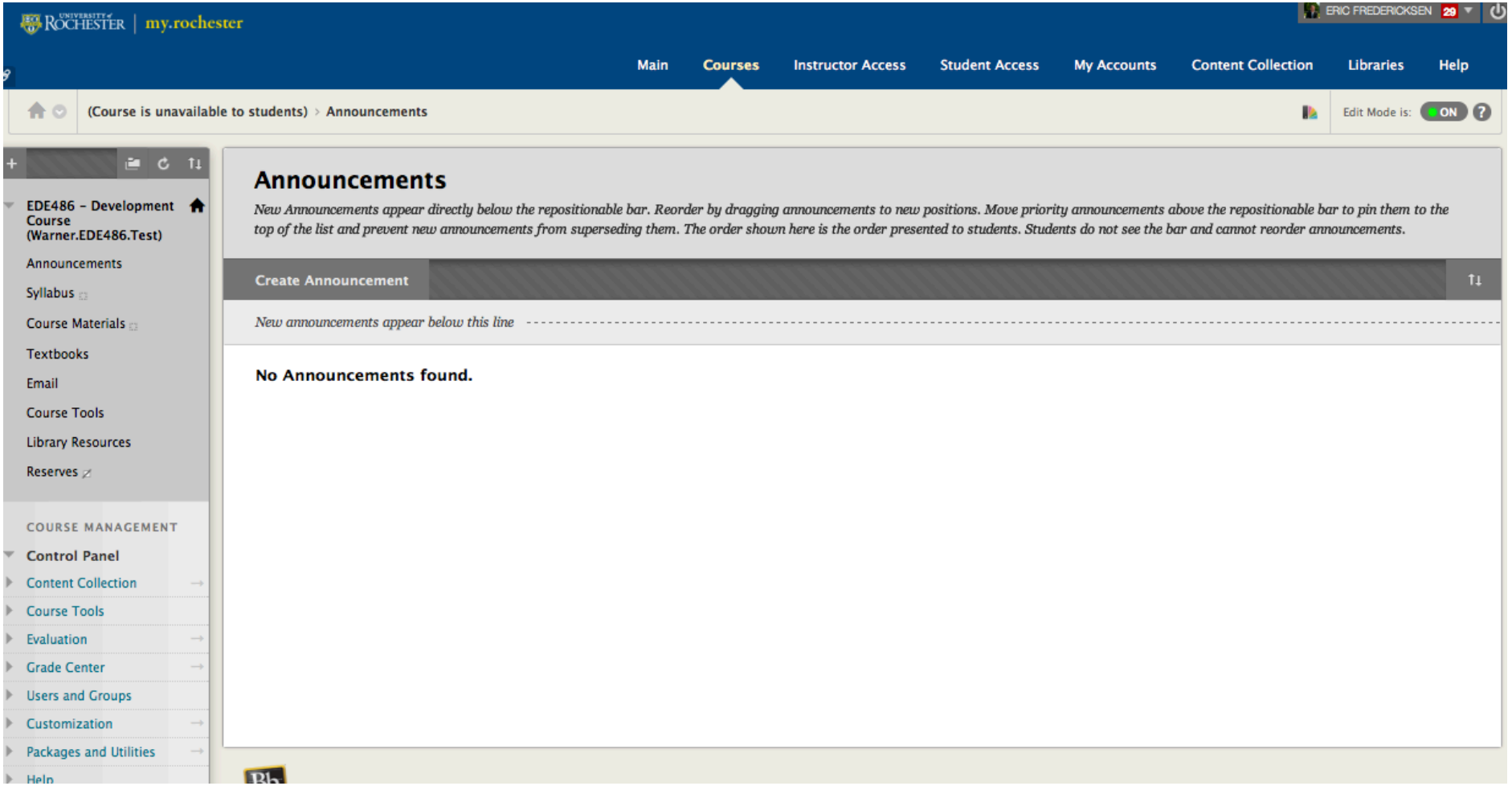
Learning Objectives Table

Learning Objectives	Assessment	Instructional Activities

Introduction to the Online Course Template

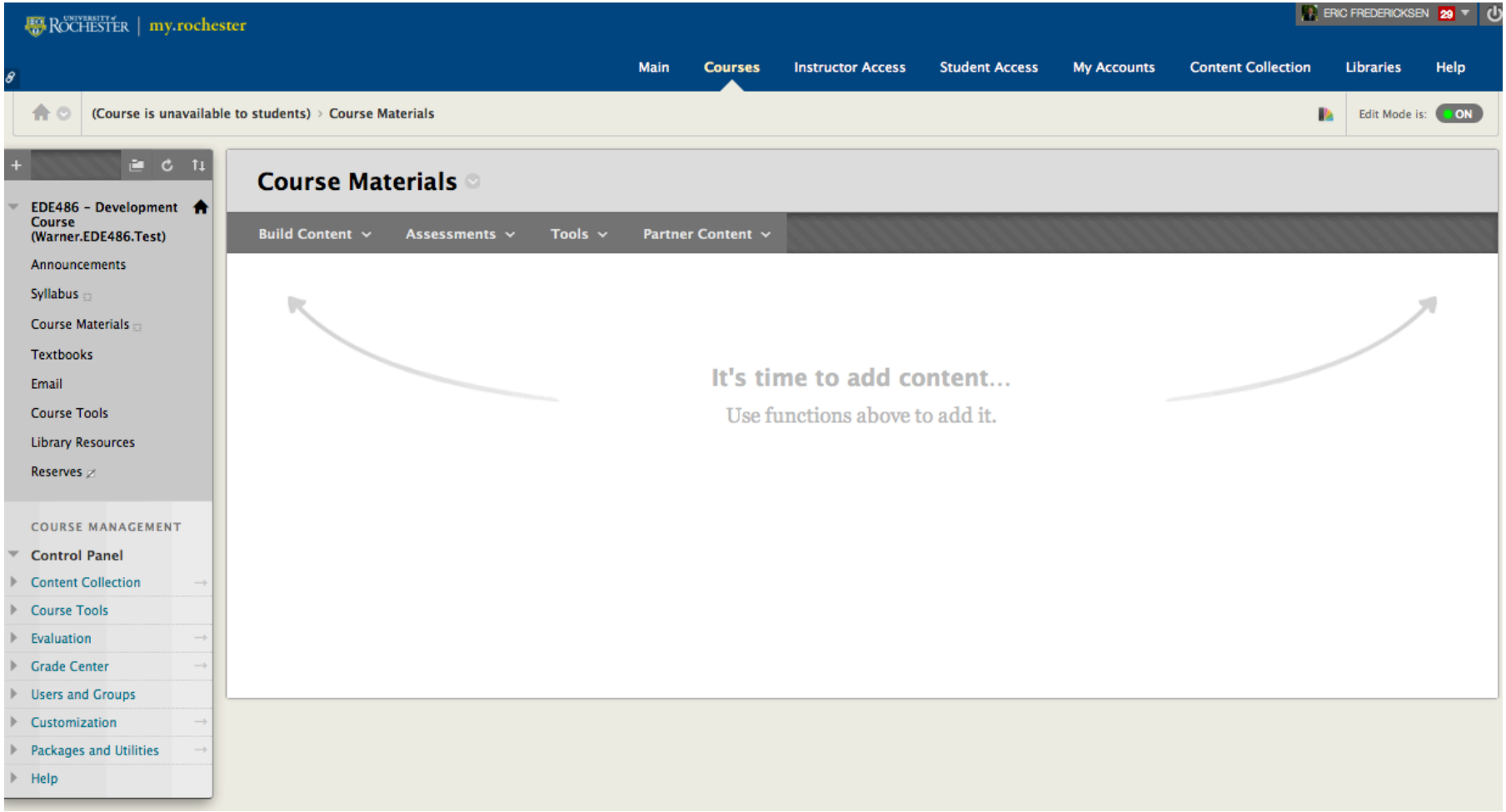
Getting Started with Blackboard

The basic course shell



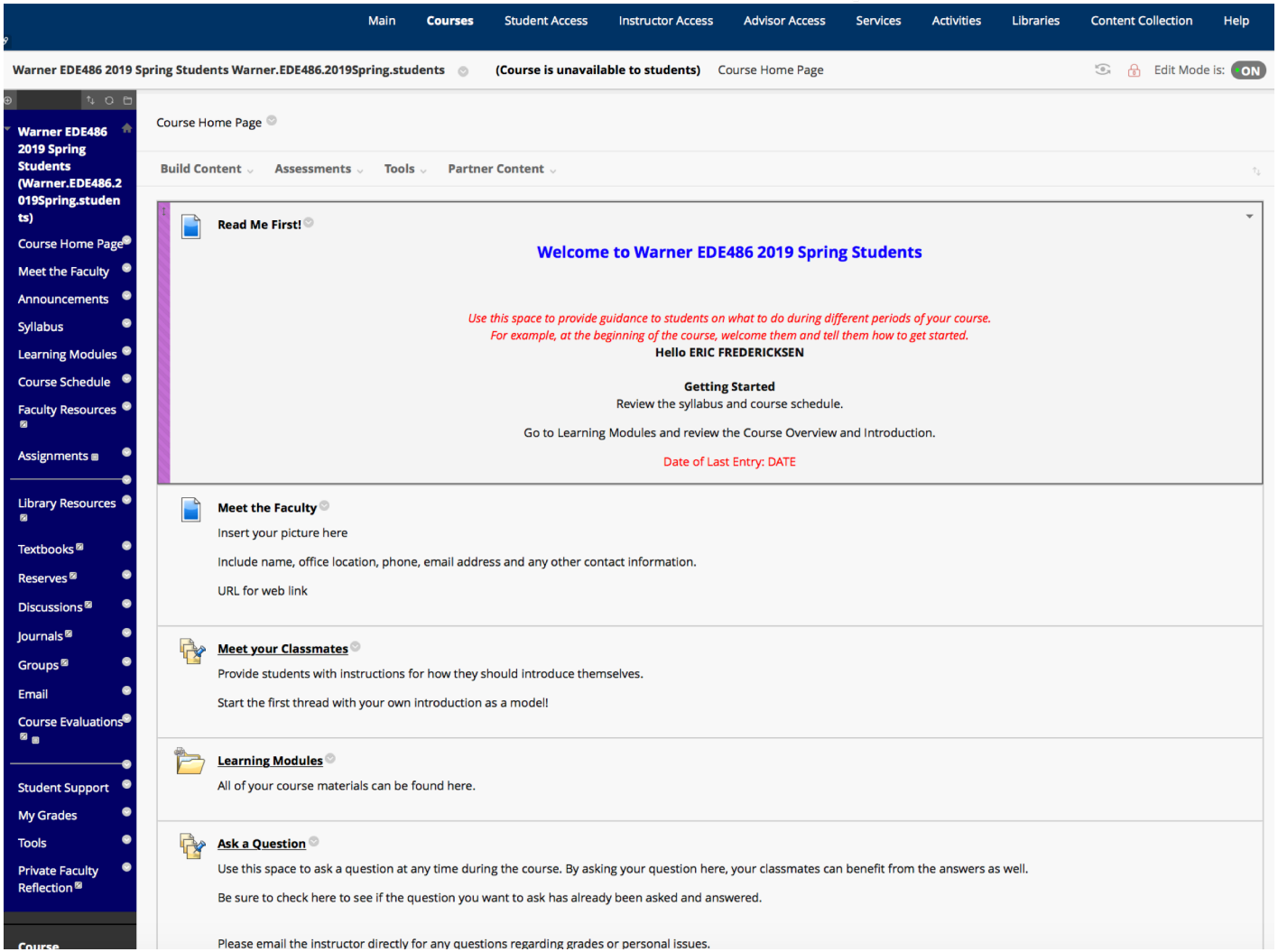
Getting Started with Blackboard

The basic course shell



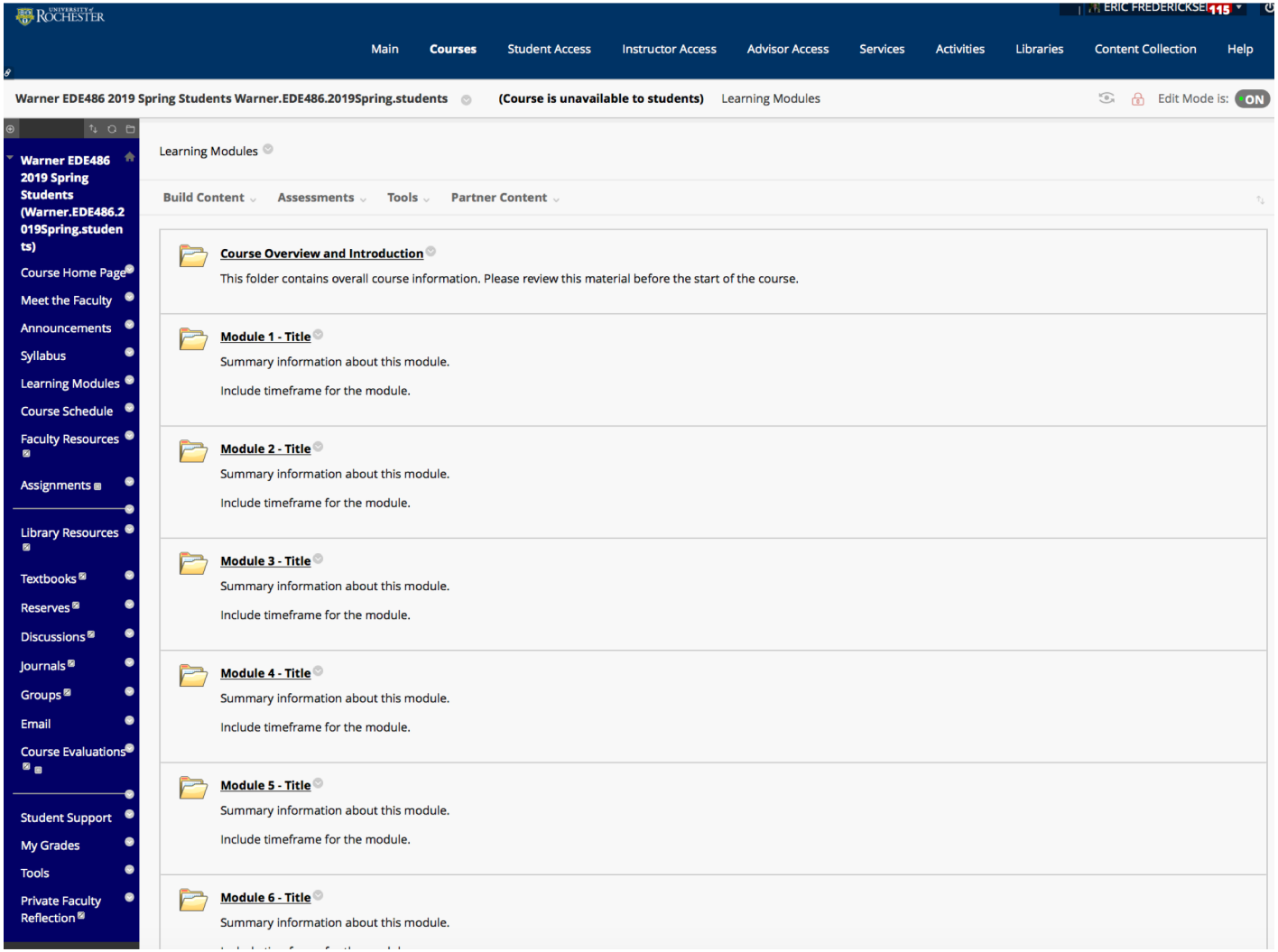
Getting Started with Blackboard

The Online Course Template



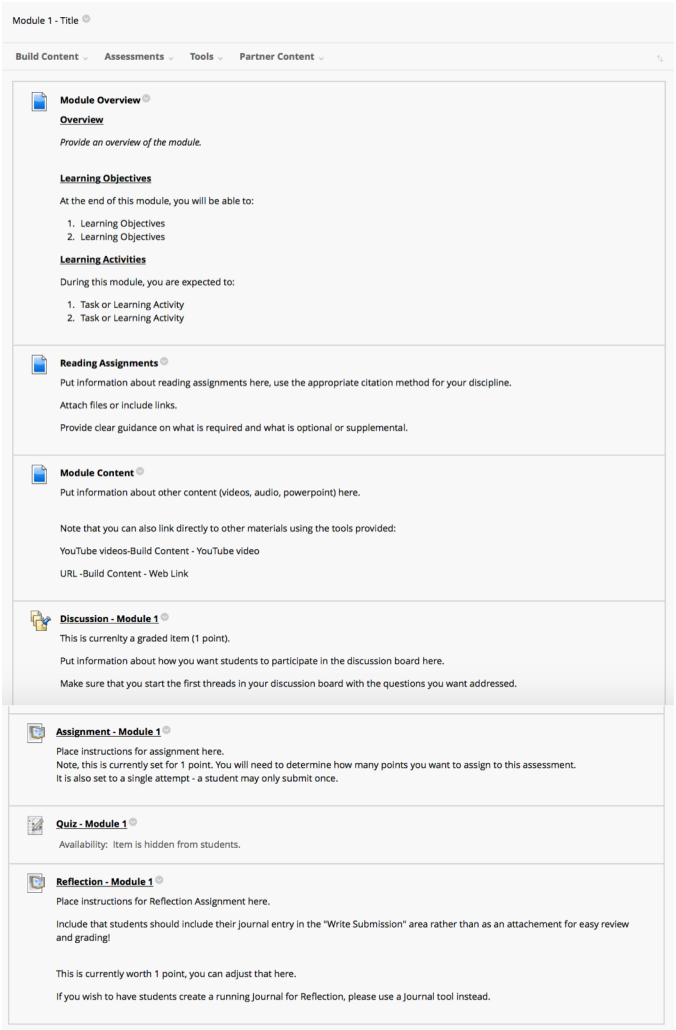
Getting Started with Blackboard

The Online Course Template



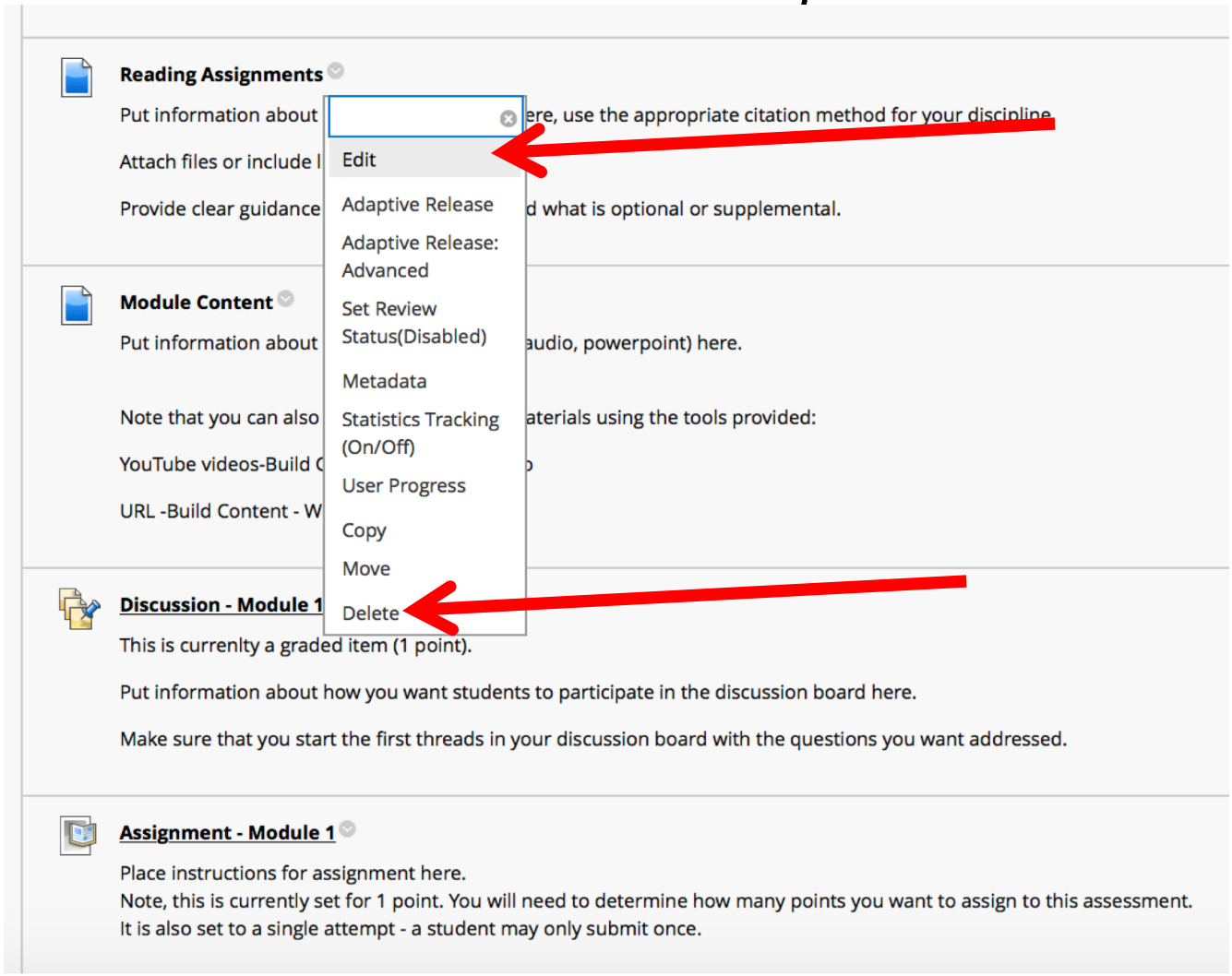
Getting Started with Blackboard

The Online Course Template



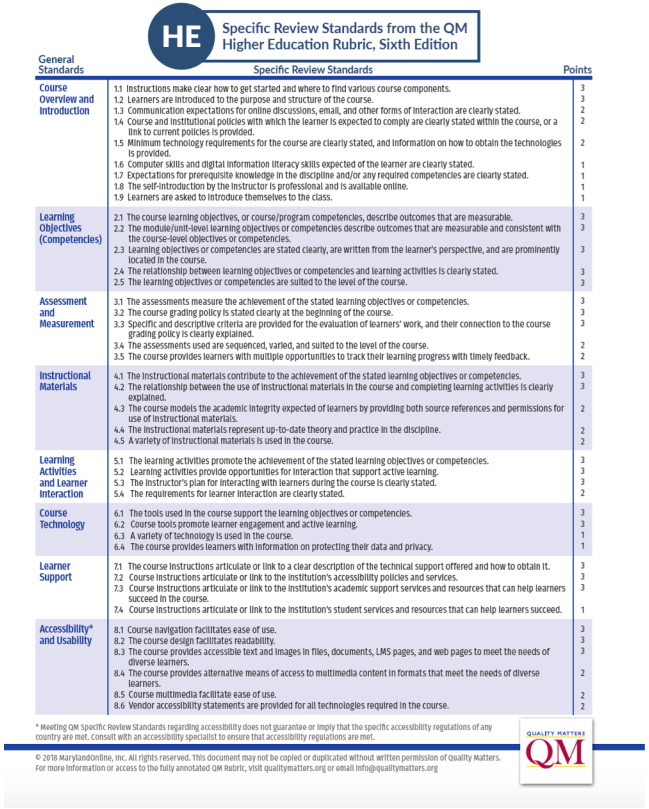
Getting Started with Blackboard

The Online Course Template



Quality Matters

- A national program focused on quality online course design
- www.qualitymatters.org
- A rubric with categories that include:
  1. Course Overview and Introduction
  2. Learning Objectives
  3. Assessment and Measurement
  4. Instructional Materials
  5. Learner Interaction and Engagement
  6. Course Technology
  7. Learner Support
  8. Accessibility



HE Specific Review Standards from the QM Higher Education Rubric, Sixth Edition

General Standards	Specific Review Standards	Points
Course Overview and Introduction	1.1 Instructions make clear how to get started and where to find various course components.	3
	1.2 Learners are introduced to the purpose and structure of the course.	3
	1.3 Communication expectations for online discussions, email, and other forms of interaction are clearly stated.	2
	1.4 Course and institutional policies with which the learner is expected to comply are clearly stated within the course, or a link to current policies is provided.	2
	1.5 Minimum technology requirements for the course are clearly stated, and information on how to obtain the technologies is provided.	2
	1.6 Computer skills and digital information literacy skills expected of the learner are clearly stated.	1
	1.7 Expectations for prerequisite knowledge in the discipline and/or any required competencies are clearly stated.	1
	1.8 The self-introduction by the instructor is professional and is available online.	1
	1.9 Learners are asked to introduce themselves to the class.	1
Learning Objectives (Competencies)	2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable.	3
	2.2 The module/unit-level learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.	3
	2.3 Learning objectives or competencies are stated clearly, are written from the learner's perspective, and are prominently located in the course.	3
	2.4 The relationship between learning objectives or competencies and learning activities is clearly stated.	3
	2.5 The learning objectives or competencies are suited to the level of the course.	3
Assessment and Measurement	3.1 The assessments measure the achievement of the stated learning objectives or competencies.	3
	3.2 The course grading policy is stated clearly at the beginning of the course.	3
	3.3 Specific and descriptive criteria are provided for the evaluation of learners' work, and their connection to the course grading policy is clearly explained.	3
	3.4 The assessments used are sequenced, varied, and suited to the level of the course.	2
	3.5 The course provides learners with multiple opportunities to track their learning progress with timely feedback.	2
Instructional Materials	4.1 The instructional materials contribute to the achievement of the stated learning objectives or competencies.	3
	4.2 The relationship between the use of instructional materials in the course and completing learning activities is clearly explained.	3
	4.3 The course models the academic integrity expected of learners by providing both source references and permissions for use of instructional materials.	2
	4.4 The instructional materials represent up-to-date theory and practice in the discipline.	2
	4.5 A variety of instructional materials is used in the course.	2
Learning Activities and Learner Interaction	5.1 The learning activities promote the achievement of the stated learning objectives or competencies.	3
	5.2 Learning activities provide opportunities for interaction that support active learning.	3
	5.3 The instructor's plan for interacting with learners during the course is clearly stated.	3
	5.4 The requirements for learner interaction are clearly stated.	2
Course Technology	6.1 The tools used in the course support the learning objectives or competencies.	3
	6.2 Course tools promote learner engagement and active learning.	3
	6.3 A variety of technology is used in the course.	1
	6.4 The course provides learners with information on protecting their data and privacy.	1
Learner Support	7.1 The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.	3
	7.2 Course instructions articulate or link to the institution's accessibility policies and services.	3
	7.3 Course instructions articulate or link to the institution's academic support services and resources that can help learners succeed in the course.	3
	7.4 Course instructions articulate or link to the institution's student services and resources that can help learners succeed.	1
Accessibility* and Usability	8.1 Course navigation facilitates ease of use.	3
	8.2 The course design facilitates readability.	3
	8.3 The course provides accessible text and images in files, documents, LMS pages, and web pages to meet the needs of diverse learners.	3
	8.4 The course provides alternative means of access to multimedia content in formats that meet the needs of diverse learners.	2
	8.5 Course multimedia facilitate ease of use.	2
	8.6 Vendor accessibility statements are provided for all technologies required in the course.	2

* Meeting QM Specific Review Standards regarding accessibility does not guarantee or imply that the specific accessibility regulations of any country are met. Consult with an accessibility specialist to ensure that accessibility regulations are met.

© 2018 MarylandOnline, Inc. All rights reserved. This document may not be copied or duplicated without written permission of Quality Matters. For more information or access to the fully annotated QM Rubric, visit qualitymatters.org or email info@qualitymatters.org

Advanced Certificate in Online Teaching

Program requirements:

- Core courses:
  - EDE484: Online Teaching & Learning (*OR: EDU497: Teaching in Higher Education & Health Care Settings)*
  - EDE486: Designing Online Courses
- Practicum in Online Teaching (EDF488)
- Two specialization courses *(semi-electives)*
  - *A "teaching methods" course in the area of specialization*
  - *Another course that can support the design and facilitation of online learning experiences appropriate to one's own teaching interests and instructional context*

Approved by NYSED

Advanced Series Online Teaching for UR Faculty

- Core courses:
  - EDE470: Online Teaching & Learning – 1 credit for 3 weeks
  - EDE471: Designing Online Courses – 2 credits for a semester
- Practicum in Online Teaching (EDF488)

- No cost to the faculty member or the School/Department
  - *Use employee tuition benefits (covers 80 or 90 %)*
  - *Warner Schools provides special Dean's award to cover the difference*

Why do we do this as a course?

- the ability to provide an experience as an online student
- the experience of using the online course template (which is based on Quality Matters) as a student
- gain exposure to best practices and examples of good online teaching
- More efficient with your time…

Questions?