

Research Data Management

LIBRARIAN ACADEMY



ASIS&T Annual Meeting 2019 Product Theater

Rong Tang, Zhan Hu, and Danielle Pollock

Agenda

- RDMLA Overview
- RDMLA Course Development Process
- Challenges and Lessons Learned
- Next Steps
- RDMLA Canvas course site demo

What is RDMLA?

RDMLA [About](#) [Contact](#) [RDMLA Curriculum](#) [Events](#) [RDMLA Community](#) [Publications](#)



The **Research Data Management Librarian Academy (RDMLA)** is a free online professional development program for librarians, information professionals, or other professionals who work in a research-intensive environment throughout the world.

RDMLA features a unique partnership between a LIS academic program, academic health sciences and research libraries, and Elsevier, which financially supported the program.

Partner institutions include:



Find out more about the RDMLA community here: [RDMLA Community](#).

RDMLA Curriculum

The **RDMLA** curriculum focuses on the essential knowledge and skills needed to collaborate effectively with researchers on data management. The curriculum features **Eight Online Self-paced Learning Units** that covers topics such as the foundations of research data management (RDM), research culture, advocating and marketing for RDM services in libraries, project management, overview of research data management tools and etc.

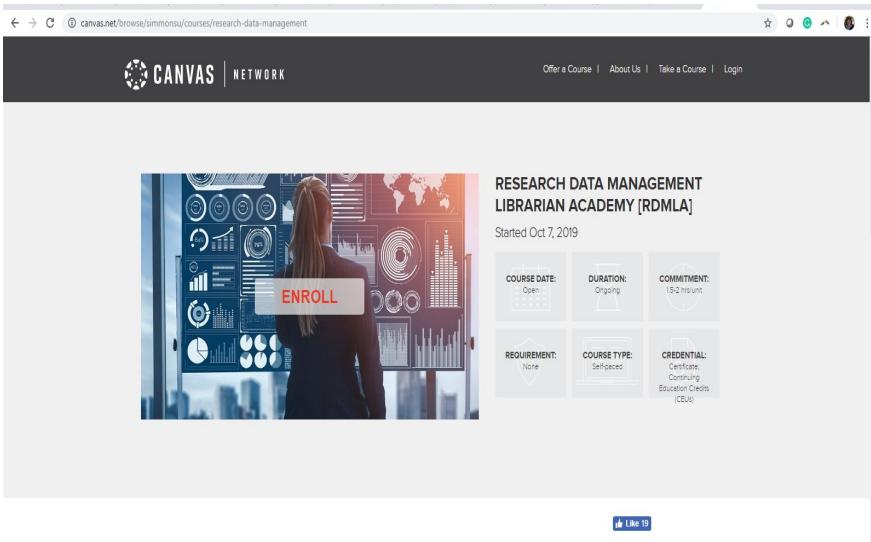
An online educational program offering individuals to learn about research data management practices.

Developed by a team of librarians and LIS faculty who have expertise with RDM.

Website: rdmla.github.io



What is RDMLA?



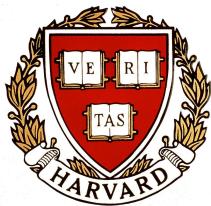
- The Academy offers **eight** units which can be taken in sequence or out of order.
- All units are hosted online via the Canvas platform under **CC-BY-NC-SA licensing**.

URL:

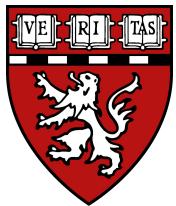
canvas.net/browse/simmonsu/courses/research-data-management



Partner Institutions



Harvard
University



Harvard
Medical
School



Simmons
University



Boston
University



Tufts
University



Northeastern
University



Massachusetts
College of
Pharmacy and
Health
Sciences



Brown
University



Elsevier financially supports the program

RDMLA Project Team

Leadership

Elaine Martin (Harvard)
Rong Tang (Simmons)
Jean Shipman (Elsevier)

Project Staff

Zhan Hu (Simmons)
Irena Fayngold, Ellen Berrigan, Madhu Narayan (Simmons)
Ashley Thomas (Simmons)

Faculty

See Next Slides

Simmons SLIS Simmons Online

Sanda Erdelez (SLIS Director, Simmons)
Kristen Palson & Madhu Narayan (Simmons Online)

RDMLA Faculty

Unit 1

Elaine Martin (Harvard); Julie Goldman (Harvard); Danielle Pollock (Simmons); Philip Coombs (BU)

Unit 2

Andrew Creamer (Brown)

Unit 3

Ceilyn Boyd (Harvard); [Elaine Martin \(Harvard\)](#); Richard Kaplan(MCPHS); [Eric Albright \(Tufts\)](#); Mary Blanchard (BU)

Unit 4

Jen Ferguson (Northeastern); Rebecca Morin (Tufts)

Unit 5

Rachel Lewellen (Harvard); Alison Thornton (Harvard); Danielle Adams (Harvard)

Unit 6

Berika Williams (Tufts)

Unit 7

Scott Lapinski (Harvard), Roger Vargas (Harvard)

Unit 8

Julie Goldman (Harvard); Scott Lapinski (Harvard), Jean Shipman (Elsevier)

Timeline



Summer - Fall 2018

- A needs assessment survey
- A LIS educator short survey
- A competency scan
- An inventory of training and formal RDM curricula



Spring-Summer 2019

- Course unit design and development
- Video recording, implementation of exercises and interactive learning objects
- Establish Simmons CE system



Fall 2019

- QA tests
- Usability and UX tests
- Formal launch of RDMLA on October 7, 2019
- Simmons SLIS CE credit issuance (start in January 2020)

RDMLA Learning Statistics

From Oct 7, 2019 to October 15, 2019:

- **Active Students:** 557
- **Discussion forum posts:** 103
- **Quiz submissions:** 347

RDMLA Curriculum



UNIT ONE
Foundations of RDM



UNIT TWO
Navigating Research Culture



UNIT THREE
Advocating for RDM in Libraries



UNIT FOUR
Launching Data Services



UNIT FIVE
Project Management and Assessment



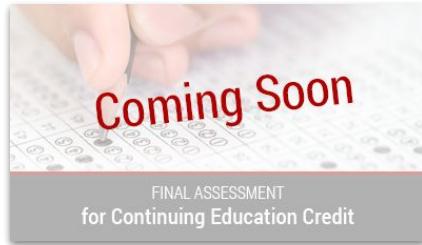
UNIT SIX
Data Analysis and Visualization Tools



UNIT SEVEN
Coding Tools



UNIT EIGHT
Platform Tools



Welcome Page

PD-0116-RESEARCH-DATA-MANAGEMENT

2019-Q4

Home

Announcements

Modules

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Collaborations

Syllabus

Quizzes

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Research Data Management Librarian Academy (RDM...)

Welcome!

This course explores research data management (RDM) best practices. The RDMLA consists of 8 units which can be taken individually, or as a complete program.

Every unit includes text and video-based content. For most units, you will be required to take a short summative quiz at the end. We recommend starting with Unit 1 but the units may be taken in any order. For continuing education credits, the completion of all 8 units is as a prerequisite. Please plan to spend approximately 1 to 1.5 hours to complete each unit.

To get started, simply click any of the **unit titles** below. You can also navigate by selecting "Modules" in the left navigation panel. The Module view offers you a high level navigation of each unit and the sections within.

Please note that some elements of our home page may not be viewable on mobile browsers. For an optimized experience, we recommend viewing this course on your computer.

For general questions that are not answered in the course materials or in [Canvas Guides](#), please visit the [Help Forum](#).

This table includes 9 unit navigation blocks for the course

GETTING STARTED Course Orientation	UNIT ONE Foundations of RDM
UNIT TWO Navigating Research Culture	UNIT THREE Advocating for RDM in Libraries

Import from Commons

Choose Home Page

View Course Stream

Course Setup Checklist

New Announcement

Student View

Coming Up

View Calendar

Nothing for the next week

Course Orientation

PD-0116-RESEARCH-DATA-MANAGEMENT > Pages > RDMLA: An Introduction

Published

Pages

View All Pages

RDMLA: An Introduction

In this video, Elaine Martin and Rong Tang (RDMLA co-leaders) provide more information about RDMLA, including its partnerships, the community, and the curriculum.

Click play to begin

Run Time: 301 | Transcript | Slideshow

Visit the RDMLA website to learn more.

Previous

Next





UNIT ONE

Foundations of RDM

Instructors



Philip Coombs



Elaine Martin



Julie Goldman



Danielle Pollock

Unit Objectives

- List, order, and describe the stages in the DataOne Data Life Cycle
- Identify the information professional's role in each stage of the data life cycle
- Evaluate research workflows in terms of the data lifecycle and the information professionals' role



UNIT TWO

Navigating Research Culture

Instructor



Andrew Creamer

Unit Objectives

- Describe and differentiate among the partners comprising an institution's research ecosystem.
- Identify specific ways to navigate the culture and challenges of Team Science.
- Identify ways that RDM librarians can partner with members of the research ecosystem.



UNIT THREE

Advocating for RDM Libraries

Instructors



Ceilyn Boyd



Elaine Martin



Mary Blanchard



Eric Albright



Richard Kaplan

Unit Objectives

- Describe common institutional research data management stakeholders, including advocates and potential partners.
- Describe common institutional and organizational barriers to implementing research data management services in the library.
- Compare common successful and unsuccessful strategies for advocating for research data management services.

UNIT FOUR

Launching Data Services

Instructors



Jen Ferguson



Rebecca Morin

Unit Objectives

- Evaluate how their institution might fit with various data service approaches and models.
- Describe the stakeholders and groups to consider when launching and managing data services in libraries.
- Design an action plan to establish data services in their institution.



UNIT FIVE

Project Management and Assessment

Instructors



Rachel Lewellen



Danielle Adams



Alison Thornton

Unit Objectives

- Explain why project planning is useful
- Outline the key elements of every project plan,
- Identify three areas of assessment: Process Evaluation, Outcomes, and Impact/Value.

Instructor



Berika Williams

Unit Objectives

- Define data analysis and data visualization and understand their role in research data management
- Identify how R and Tableau are useful for data analysis and visualization
- Determine the appropriate tool for their needs and devise a plan to learn a tool further



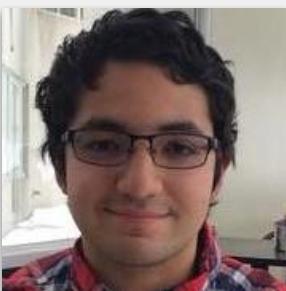
UNIT SEVEN

Coding Tools

Instructors



Scott Lapinski



Roger Vargas

Unit Objectives

- Determine how to use Python and Jupyter to best meet your needs
- Developing the expertise to produce data visualizations



UNIT EIGHT

Platform Tools

Instructors



Julie Goldman



Scott Lapinski



Jean P. Shipman

Unit Objectives

- Identify what platforms should be implemented and when
- Demonstrate how to use and implement the platform tools
- Synthesize why a particular platform tool is the right choice



FINAL ASSESSMENT for Continuing Education Credit

[View All Pages](#)Published[Edit](#)

:

CE Credit: Coming Soon!



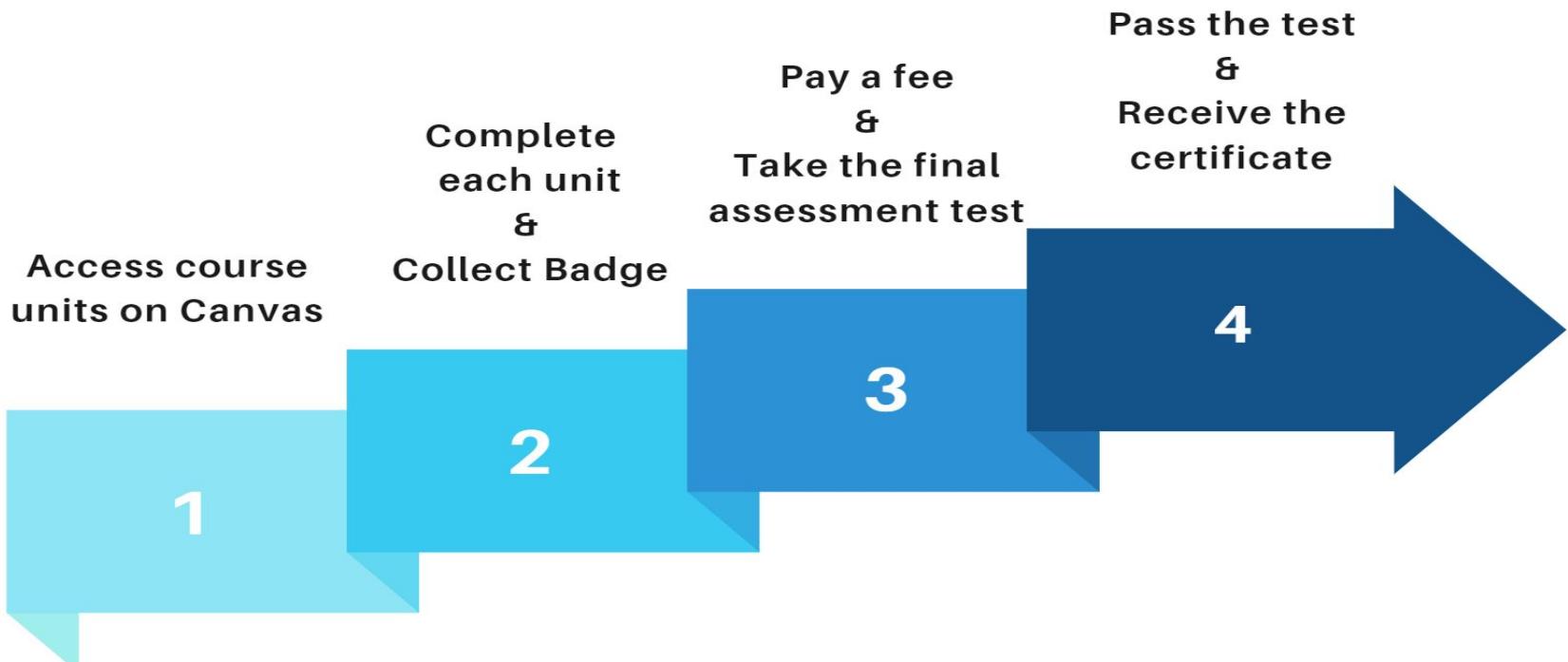
Thank you for your interest in the Continuing Education Credit.

RDMLA has partnered with Simmons University's School of Library and Information Science to offer an accredited continuing education test. Registration for the CE test is expected to open in January 2020. A more detailed description and pre-test requirements is forthcoming.

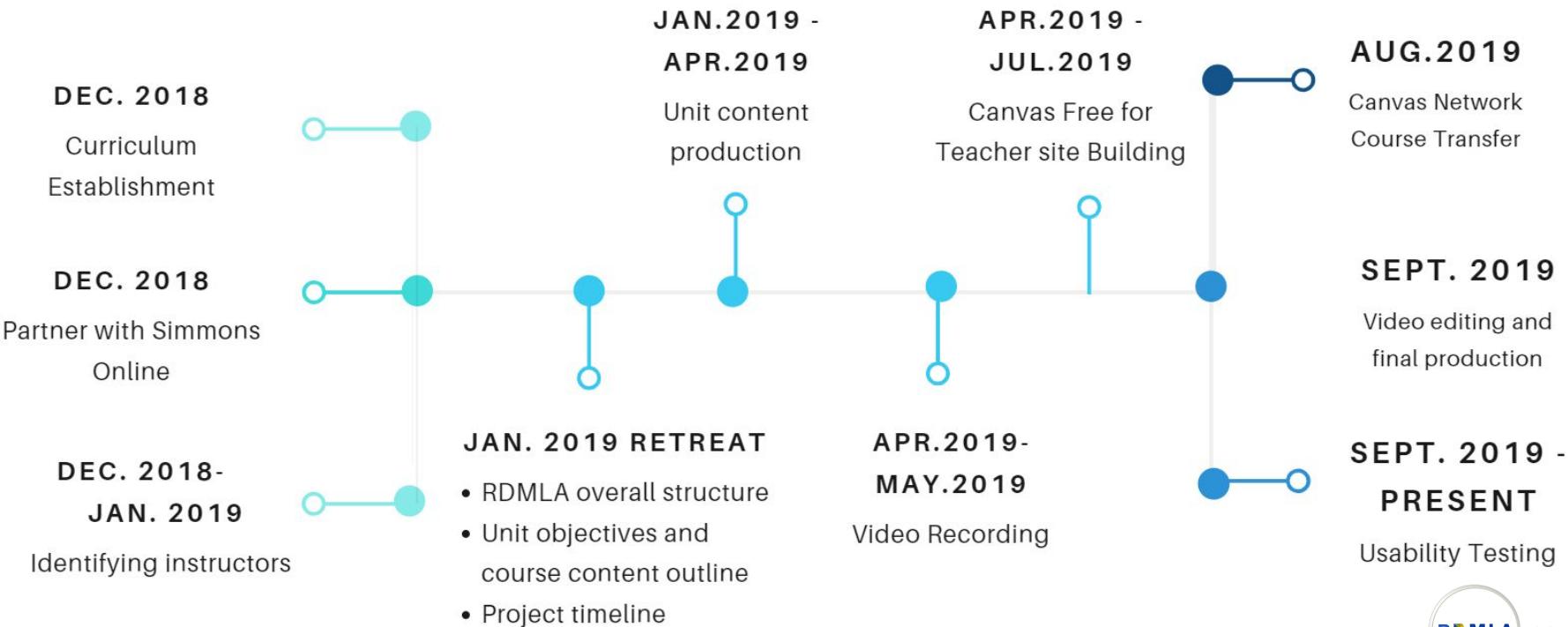
Please check back in a few weeks for more information!

[◀ Previous](#)

The CE Process



RDMLA Course Development Process



RDMLA Usability & UX Study

Goals

- Identify areas of usability problems and provide a list of quick fixes
- Investigate user experience with RDMLA course and examine potential demographic differences in participants' performance and perceptions of the course

Timeline

- Early August 2019:
Simmons IRB approval
- Early September 2019:
RDMLA Test Site Setup
Pilot Testing
- September 10 2019 - Present:
Online Usability Test Sessions

Participants

LIS professionals, LIS students and faculty

RDMLA Usability & UX Study

A screenshot of a Google Docs document titled "P027_A'Lyn Etien Task Instrument_Unit 157". The document contains a video call interface with two participants. The main content area displays the title "RDMLA Course Site Usability/UX Study" and a section titled "Confirm the Agreement of Informed Consent". The text within this section reads:

You have been asked to review the consent form online (<https://tinyurl.com/RDMLAconsent>) and indicate that you agree to participate. Could you please orally indicate your consent by stating "Yes, I consent to participate in this research study."

A screenshot of a web browser displaying a course module titled "UNIT TWO Navigating Research Culture". The page includes a sidebar with navigation links for Canvas, Account, Dashboard, Courses, Groups, Calendar, Inbox, and Help. The main content area features a video player showing a man speaking, with the caption "Basic science research teams pursue foundational knowledge and understanding and applied researchers rely on this knowledge to help them research ways to solve problems, such as cures for diseases, using cellular and animal models." Below the video, a "KEY TAKEAWAYS" section lists:

- Basic science research teams pursue foundational knowledge and understanding and applied researchers rely on this knowledge to help them research ways to solve problems, such as cures for diseases, using cellular and animal models.
- There are many types of clinical research and clinical researchers study and improve human health.
- Translational research teams of basic research scientists and clinical researchers bring knowledge and interventions developed in the lab into trial in the clinic to improve human health's "bench to bedside".
- Research can happen in many environments, including collecting primary data in the lab, clinic, or out in the field. Many types of informatics research rely on these existing data to discover new findings through secondary analyses.

At the bottom of the page are "Previous" and "Next" navigation buttons.

Comments by Usability Participants

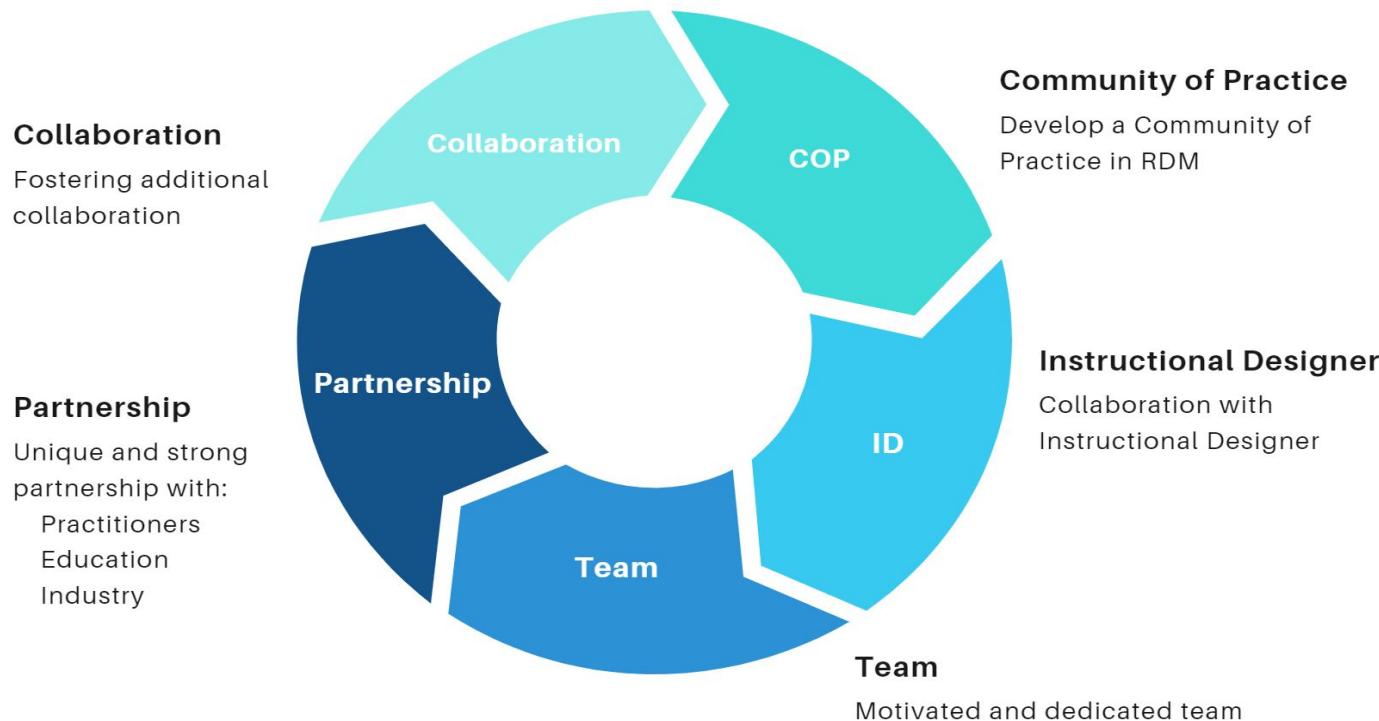
Positive Reaction to RDMLA

- P027: "I saw Tufts and Harvard and Simmons, Boston University of course, Elsevier ...There were several very prestigious organizations involved. It makes me feel like this is a really nice joint effort."
- P031: "It's self paced ...I like the course objectives, I like that it's on there because now I'm getting more of like, alright this is what we're going to be talking about."

Usability Comments

- P001: "It looks very nice and very simple. I like the layout of the individual units...It's very clearly laid out."
- P031: "I will say, now that I'm in here [Unit overview page], I wish there was some kind of overarching hierarchy tree, on the side of the page. You know if I were coming back...I know on the front page you can like skip around."

RDMLA Development: Recipe for Success



RDMLA Development: Challenges

Instructional Designer

Multiple changes of Instructional Designers

Instructors

Faculty workload and the demand of RDMLA tasks

Pace

Different pace of different units

Communications

Differences in communications and Interaction styles

RDMLA: Lessons Learned

- Plan for time to investigate appropriate
 - learning management system
 - video storage/sharing spaces
 - course development documentation file sharing systems
- Be more prepared and sort out legal/contracting issues associated building a learning platform
- For project management and communications:
 - Monthly meetings were effective but not all could attend the meeting.
 - Would be helpful to communicate to those absent what was accomplished in a given meeting

Next Steps

- Continue usability testing (Plan to complete before Thanksgiving_
- Establish Simmons CE (to be available Jan 2020)
- Adding new units to RDMLA
 - **Data Ethics**
 - **Data Copyright**
- Exploring international partnerships for multilingual versions of RDMLA
- Doing research of learning analytics to improve and enhance RDMLA



Monthly Meeting
April, 2019



Monthly Meeting
May, 2019



Monthly Meeting
May, 2019



Monthly Meeting
May, 2019

Course Site Demo



Check out the Course at:

<https://www.canvas.net/browse/simmonsu/courses/research-data-management>

Please spread the word for us!



Questions?