

**SAMR\*** BASED DISTANCE LEARNING:

HOW TO TRANSITION FROM

F2F \* TO ONLINE SOLUTIONS?

**Aura CODREANU**

Associate Professor, Dr.

DRESMARA/NDU ROU

\* Substitution, Augmentation, Modification, Redefinition

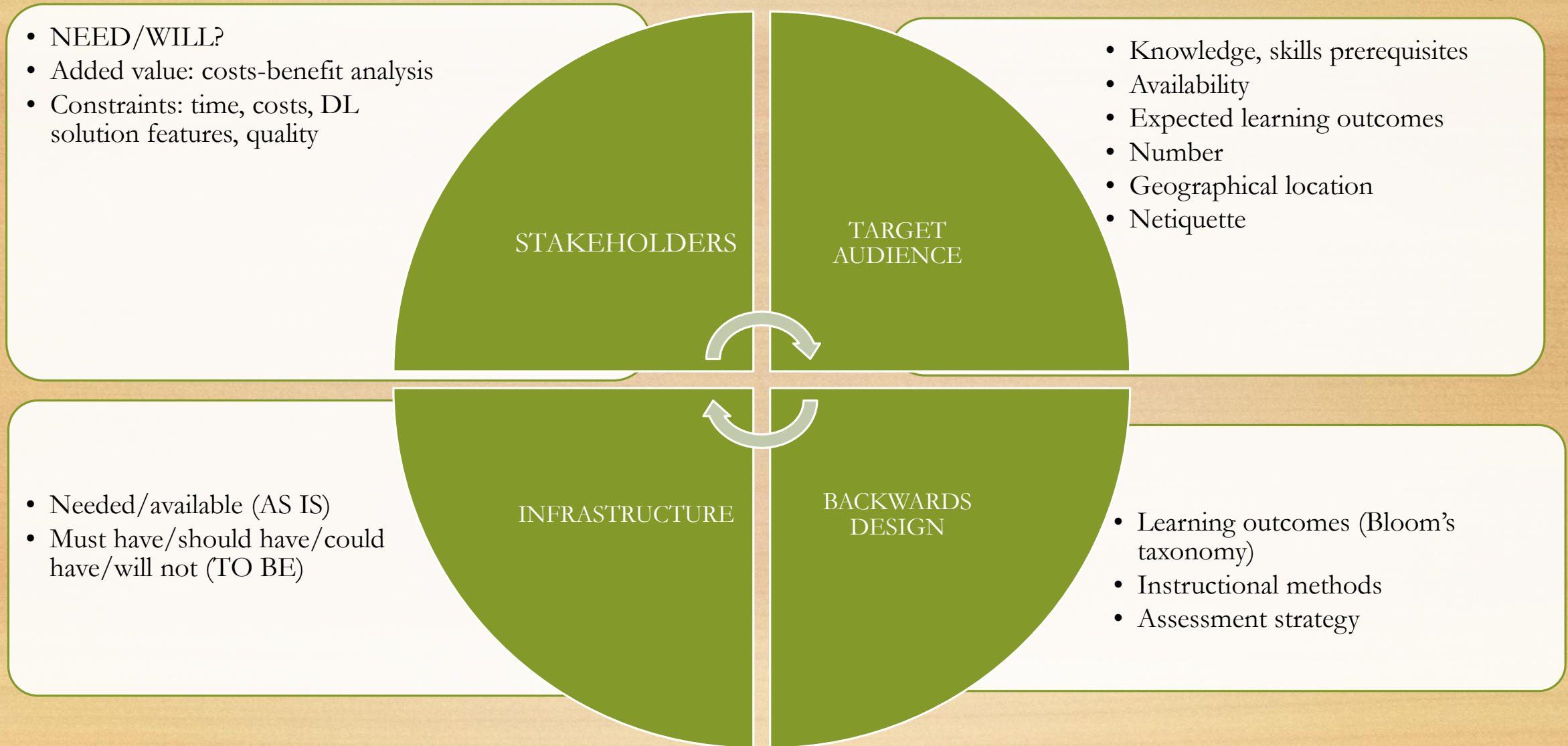
\* Face to Face

# Agenda

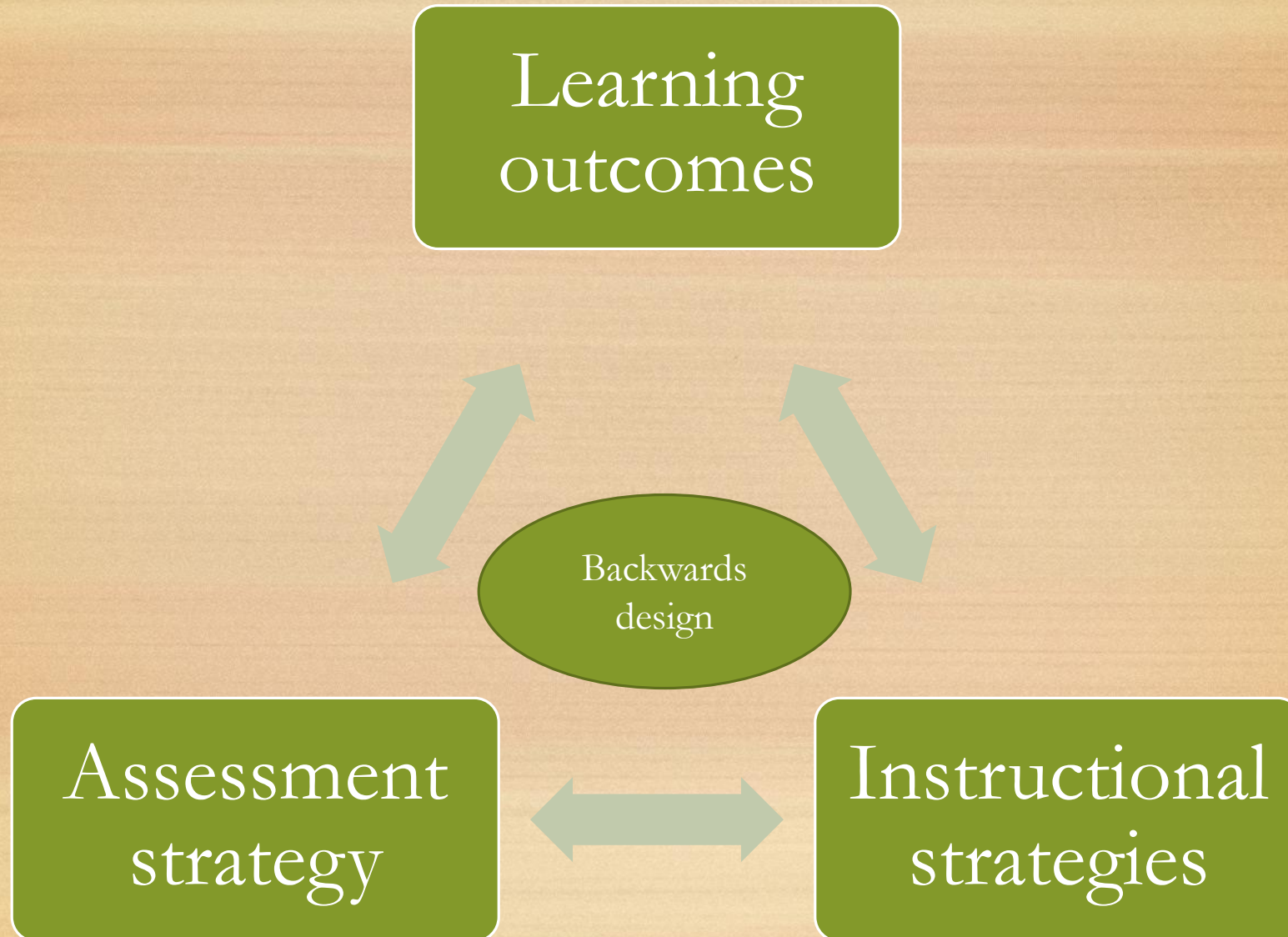
---

- **NECESSARY CONDITIONS** for transitioning F2F educational solutions to distance learning (DL)
- **TECHNOLOGY INTEGRATION: SAMR**
- **ASSESSMENT FRAMEWORK**/What does success look like?
- **CONCLUSION** and questions for reflection/discussion

# NECESSARY CONDITIONS



# NECESSARY CONDITIONS



# TECHNOLOGY INTEGRATION: SAMR

---

## ESSENTIAL QUESTIONS:

- What do students need to be able to do?
- How does technology enable them to achieve the learning outcome?
- How does teaching/instruction change as a result of using technology?

# TECHNOLOGY INTEGRATION: SAMR

---

**WORD OF CAUTION:**

**SAMR IS NOT A PRESCRIPTIVE MODEL**

<https://www.youtube.com/watch?v=pU8WKDZfgH4> (Ruben Puentedura Full Presentation)

# TECHNOLOGY INTEGRATION: SAMR

**R**

## REDEFINITION

creation of NEW TASKS PREVIOUSLY  
INCONCEIVABLE

TRANSFORMATION

technology as a partner

**M**

## MODIFICATION

SIGNIFICANT task redesign

**A**

## AUGMENTATION

direct substitute, WITH FUNCTIONAL improvement  
in outcome or learning process

ENHANCEMENT

technology as a master

**S**

## SUBSTITUTION

direct substitute, NO FUNCTIONAL improvement in  
outcome or learning process

# SAMR: GUIDING QUESTIONS

## SAMR

LEVEL	QUESTIONS
REDEFINITION/ REPURPOSING	What tasks are performed via technology integration that could not be done before which also foster participants' critical thinking, collaboration and creativity skills? Does technology integration encourage use of external sources of information/technology tools not provided on the course specifically?
MODIFICATION	Is the task (instructional/assessment) significantly redesigned? Do students become <b><u>involved in using technology</u></b> to visualize/explore during the learning process? Do they become <b><u>content integrators and creators</u></b> ? Do they gain <b><u>a personal stake in the process of learning</u></b> ?
AUGMENTATION	Can students <b><u>interact with the content</u></b> (i.e. instant feedback to quizzes, engaging)? OR What <b>improvements are made/could be made to the tools</b> employed at substitution level (power point, video, assessment tool, e-docs, etc.) to better <b><u>engage</u></b> participants?
SUBSTITUTION	What does the course gain by replacing paper based tools with technological solutions (i.e.videos, pdfs/electronic versions of documents, highlighted text, pictures, etc.?)

For more questions see: [http://www.hippasus.com/rrpweblog/archives/2013/10/26/SAMRLadder\\_Questions.pdf](http://www.hippasus.com/rrpweblog/archives/2013/10/26/SAMRLadder_Questions.pdf)

For examples of technology used per SAMR levels: <https://pressbooks.nebraska.edu/onlineteaching/chapter/samr-model-for-integrating-technology/>



# SAMR: short example

## WRITING A PAPER

LEVEL	Questions	<u>First time activities</u>
REDEFINITION/ REPURPOSING	What tasks are performed via technology integration that could not be done before which also foster participants' critical thinking, collaboration and creativity skills?	Blogging, receiving feedback, responding Wiki product... Youtube product...
MODIFICATION	Do students become <b><u>involved in using technology</u></b> to visualize/explore during the learning process? Do they become <b><u>content integrators and creators</u></b> ? Do they gain <b><u>a personal stake in the process of learning</u></b> ?	Google docs for peer/instructor feedback (collaborative)
AUGMENTATION	Can students <b><u>interact with the content</u></b> (i.e. instant feedback to quizzes, engaging )? OR What <b>improvements are built in/made/could be made to the tools</b> employed at substitution level (power point, video, assessment tool, e-docs, etc.) to better <b><u>engage</u></b> participants?	Text to speech/ Speech to text Typos checked/corrected via Spelling and Grammar function
SUBSTITUTION	What does the course gain by replacing paper based tools with technological solutions (i.e.videos, pdfs/electronic versions of documents, highlighted text, pictures, etc.?)	Microsoft office suite (typing)

# EXAMPLE: F2F to DL course CONTEXT

---

Name of course: Project management

Delivery mode: F2F/residential

Duration: 1 month; 27hrs/week

Level of course : foundational/introductory

Course disciplines: Project Management, Microsoft Project Software,  
Funding sources

# EXAMPLE: F2F to DL course CONTEXT

---

## COURSE LEARNING OUTCOME:

By the end of the course the participants will be able to **create a project proposal plan** detailing the 9 knowledge areas characteristic of project management in accordance with the requirements of the funding source identified as relevant for their project idea and based on their employment of Microsoft Project Software as a tool for SMART project resource planning

# EXAMPLE: F2F to DL course

SAMR LEVELS	F2F
MODIFICATION	N/A
REDEFINITION	<p>-<b>Microsoft project software</b> for individual files</p> <p>-Forum for asking advice from peers/sharing work/commenting on peers' work</p>
AUGMENTATION	<p><b>LMS :</b></p> <ul style="list-style-type: none"><li>-forum for tracking issues</li><li>-document archive</li><li>-assessment (T/F//Multiple choice)</li><li>- <b>Google</b> for research/</li><li>- <b>library databases</b></li><li>-<b>email</b> for T directed feedback</li><li>- Word track and review for T feedback and back evaluation</li><li>-<b>WhatsApp group</b></li><li>- Kahoot</li></ul>
SUBSTITUTION	<ul style="list-style-type: none"><li>• Power point presentations;</li><li>• Videos;</li><li>• Word documents;</li><li>• Pdf books;</li><li>• Excel files etc.;</li></ul>

# EXAMPLE: F2F to DL course

SAMR LEVELS	Synchronous DL
REDEFINITION/REPURPOSING	Common email address; gdrive (community/collaboration/networking/sharing.....); -note-taking apps (collaboration)
MODIFICATION	-Google docs comments (peer feedback) -Padlet/Google Jamboard for brainstorming/mind-mapping -note-taking apps (individual contribution)
AUGMENTATION	<b>LMS for:</b> <ul style="list-style-type: none"><li>- <b>Synchronous online sessions (BBB-Virtual classroom/Breakout rooms/whiteboard/polls)</b></li><li>-forum for issues/communication</li><li>-document archive</li><li>-assessment</li><li>- <b>Google</b> for research</li><li>-<b>WhatsApp group</b></li><li>- Kahoot</li></ul>
SUBSTITUTION	Power point presentations; Videos; Word documents Pdf books Excel files etc.

# PROJECT MANAGEMENT: AN INTRODUCTION (demo version)

[RESUME COURSE](#)

## COURSE LEARNING OUTCOME

By the end of the course the participants will be able to write a project proposal plan detailing the 9 knowledge areas characteristic of project management (MODULE 1 – DEMO VERSION), in accordance with the requirements of the funding source identified as relevant for their project idea (MODULE 2), and based on their employment of Microsoft Project Software as a tool for SMART project resource planning (MODULE 3).

### MODULE 1 LEARNING OBJECTIVES:

By the end of **MODULE 1** students will be able to:

- define project management (PM) by identifying the 9 knowledge areas of PM,
- describe the four types of skills required in project management.

### MODULE 2 LEARNING OBJECTIVE:

- By the end of unit 2 students will be able to summarize their initial project idea by explaining who their target audience is, its needs and the main features of the product/service they will develop.

### MODULE 3 LEARNING OBJECTIVE:

- By the end of unit 3 students will update/modify their project idea by comparing and contrasting it with other alternatives and based on their individual project resource constraints.

# EXAMPLE: F2F to DL course

## CHALLENGES of transitioning F2F to synchronous DL

- Microsoft Project
  - Technical aspects: integration (existing videos –substitution level), license
  - Knowledge and skills expected of participants by the end of the course
  - Solving specific issues related to Microsoft Project (resource (over)allocation, critical path identification,etc.)
- Information overload on LMS
- Keeping track of topics covered (more power point presentations for Wrap Up/Reflection)
- Keeping track of issues raised during the synchronous session (Whiteboard) offline , providing individual/group feedback on time

## COURSES OF ACTION?

- Blended learning (no redefinition for Microsoft Project);
- Scrum package including all disciplines (Redefinition NEEDED for Microsoft Project) +Padlet/Jamboard to keep track/design concept maps
- Whatsapp for timeliness of communication on admin issues/other instant messaging options
- Backlog (an integrated online solution) (issues of accessibility offline)
- More than one instructor available at the same time (regardless of DL option)

# EXAMPLE: F2F to DL course

SAMR LEVELS	DL/ONLINE
REDEFINITION	<ul style="list-style-type: none"> <li>• <b>Backlog</b> for collaboration on various issues/LMS forum for tracking issues</li> </ul> <p>Q: how could issues raised in backlog be linked directly to email account??/?Whatsapp solution??/?Google account and connected gdrive/create a database of reference projects</p>
MODIFICATION	<ul style="list-style-type: none"> <li>• Flipped classroom (use of Scrum package) + technology enabled discussions (TOOLS ENABLING KNOWLEDGE TRACKING NEEDED) (Padlet/Google Docs/Google Jamboard )</li> <li>• Microsoft project files on common gdrive/<b>Backlog</b></li> </ul> <p>Q: How can participants access MP files when they do not have the software available on personal computers?</p>
AUGMENTATION	<p>LMS for threads, peer review, self assessment, case studies solutions, research findings</p>
SUBSTITUTION	<p>LMS</p> <p>Scrum package for overall course (All 3 disciplines included) (Articulate 360)</p>



# EXAMPLE: F2F to DL course REFLECTION

What tasks (INSTRUCTOR/PARTICIPANTS)  
(teaching presence/social presence/cognitive presence)?

What technology?

WHY?

# ASSESSMENT FRAMEWORK

## what to measure?

---

- Technology integration
- Changed pedagogy/andragogy (practices/behaviors)
- Learner achievement of outcomes

# ASSESSMENT FRAMEWORK

---

## LEARNING PRINCIPLES

- Contiguity
- Repetition/practice
- Reinforcement/satisfaction

Gagne, R. (1987)

# ASSESSMENT FRAMEWORK

---

## MOTIVATION

- Attention
- Relevance
- Satisfaction
- Confidence

ARCS model (Keller 1983)

# ASSESSMENT FRAMEWORK

---

## TECHNOLOGY/TOOLS' FEATURES

- Functionality (scale, ease of use, tech support)
- Accessibility (required equipment, costs)
- Technical requirements (LMS, operating system, browser)
- Suitability for active learning

# CONCLUSION

---

*“...emerging technologies will not only affect delivery systems, but also the way we study learning and conceive of the learning process.”*

Gagne, R. (1987). *Instructional Technology Foundations*. Hillsdale, NJ: Lawrence Erlbaum Assoc.

**SAMR**  
**BASED DISTANCE LEARNING:**  
**HOW TO TRANSITION FROM**  
**F2F TO ONLINE SOLUTIONS?**

**Aura CODREANU**

Associate Professor, Dr.

DRESMARA/NDU ROU