### The Pillars of CRE at LTU

This infographic summarizes the insights of many years of course-based undergraduate research (CRE) at LTU. Through this process of discovery and informed by the growing body of scholarly literature on CRE, we have identified three key components of a CRE course.

All course-based research courses at LTU include the following three pillars, contextualized and implemented according to their specific disciplines.

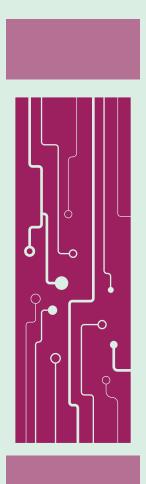












# DISCOVERY THROUGH SCHOLARLY PRACTICES

## INCLUSIVE COLLABORATION

## COMMUNICATION OF RELEVANCE

#### The course:



Includes questions and problems with unknown answers



Pursues answers through methodological awareness: students are exposed to up-to-date techniques and methods in the field



Tries to find original answers to those questions



Selects specific practices from disciplinary methods to find answers

The course:



Promotes inclusion of all groups, especially those historically underprivileged in academia



Practices cultural sensitivity in ways suitable to the field of investigation



Includes collaboration between faculty and students, within teams of students, and between the course and other communities



Gives students agency and ownership in the process of discovery (e.g. incorporating student interests in the development of questions, research designs, and solutions)

#### The course:



Explicitly asks "so what?": why does this question matter and to whom?



Maintains an ongoing process of communication and feedback between students and instructor



Considers possible audiences for the work, including but not limited to the academic community



Presents scholarly discoveries in forms that can communicate to an audience beyond the course (e.g., a journal article, a research day poster, a conference presentation, a website, etc.)