Submit a PDF copy of this completed Project Description Template to ucite@case.edu. The information in your project description should address the requested points, clarify your intentions, and concisely convey your goals.

The review committee will read applications as anonymous submissions. Please do not put your name anywhere in the text of your project description. You may include other details, such as your department and course titles.

Project Title: Lumination Station

I. Project Nature & Goals

Address the following questions as you describe the nature and goals of your project

How will your project produce better teaching and deeper student learning? What scholarship about teaching and learning does your project engage with? What service learning opportunities may be possible through your project? How might your project align with the THINK BIG strategic plan or departmental goals?

   Lumination Station utilizes cutting edge digital projection technology that will allow the department of theater to create and present live theatrical experiences in a remote and virtual world. Working in coordination with one of the top theatrical projection designers in the Cleveland area, this project will introduce faculty and students to technology that is on the forefront of theatrical design from Broadway to regional theater and beyond. While this project is spurred by the immediate challenge of presenting live theater in a remote world, its scope will reach far beyond the pandemic as it will introduce our department to cutting edge projection technology that will allow us to use the full potential of our new space, The Maltz Performing Arts Center, when it opens in the fall of 2021.

   Lumination Station utilizes digital projection technology to project live video of individual actors onto a scale-model theatrical set and then projects a video of the entire set onto a live streaming platform (YouTube live, Facebook Live, Zoom, etc). Today, many theaters are presenting 'previously recorded' presentations of 'live theater'. Lumination Station will allow 'live theater' to be presented in 'real time', even with actors, designers, technicians, and audience members in diverse, remote locations. Working together, CWRU theater students and faculty will develop a production design and implementation plan for the fall production for The Eldred Theater.

   As CWRU strives to implement a universal design for learning, Lumination Station will allow the theater department to provide everyone an opportunity to engage with a production, whether as a performer, designer, or audience member. Audiences previously unable to attend live productions will be able to enjoy live theater from the comfort of their own home. Actors that were unable to perform in a traditional, live theater setting, will be able to act 'on stage' through the use of Lumination Station's technology.

   The possibilities for service learning opportunities are endless. First of all, CWRU theater students will be working with the founder of Lumination Station to incorporate digital projection mapping tools into the design process and create an engaging and dynamic theatrical experience. In addition to working on the project at

CWRU, the founder of Lumination Station works at theaters throughout the Cleveland area and students would have the opportunity to work with him on professional productions throughout the year.

Currently, the department is exploring more ways to engage with local high school and community theaters and this technology could provide a gateway to that collaboration. In our current state of social distancing, this technology could bring people together in a safe environment, and when we are through the pandemic, it will continue to create a bond with performing arts groups. Also, our students could engage with high school students in the Cleveland area to help them implement this technology into their work. The creator of Lumination Station is one of the only projection artists in the Cleveland area and there is room for more! Our students could be getting in on the ground floor of an emerging discipline in the world of theater.

In alignment with CWRU theater department goals, Lumination Station will allow us to offer our students the opportunity to work on live theatrical productions, even in a world of social distancing.   Each and every semester, the department of theater produces two live productions for the CWRU community. If we cannot find a way to bring live theater to the world, our department and our students will not be able to achieve their learning objectives. Lumination Station will make it possible for the department of theater not only to stage a production, but it will give each and every one of our staff and students the opportunity to create! The show must go on!

For many of the reasons listed above, Lumination Station aligns with the interdisciplinary strategic goals of THINK BIG. First of all, the implementation of this technology would spur a connection between the department of theater and the Freedman Center for Digital Scholarship, and beyond. Several of the performing arts groups on campus (music, dance, theater) will be seeking ways to bring live performances to the public and Lumination Station will be able to provide opportunities for several groups on campus to reach their audiences in a creative and exciting way. And, with so many theaters in the Cleveland area shuttered do to the pandemic, this technology may provide a link between the CWRU community and the professional and community theater world of greater Cleveland.

II. Professional Impact

What is the relationship between your project and your teaching and/or research responsibilities at CWRU? Will your project have short-term or long-term impact on teaching and learning? How do you plan to maximize the number of students that may benefit from involvement in this project?

As a member of the department of theater at CWRU, my research consists of my work on academic and professional productions of plays. In the world of social distancing we all are attempting to find new and innovative ways to connect to an audience and Lumination Station will allow me to continue to create live theater and engage with a live audience. In order to bring this project to a wider audience, I am planning to submit this project for presentations at national theater conferences.

As a teacher of acting, this project will inform how I teach my acting classes, which will be taking place live in the classroom and through Zoom. And so, in class and through this project we will seek answers to the question, "How do you perform a play in a virtual world?"

I believe this project will have both short and long-term impacts on teaching and learning in the department of theater at CWRU. As each and every faculty member struggles with shifting to an online world, Lumination Station provides a portal to integrate all aspects of theater production and design. And so, I am confident this project will benefit all students and faculty in the department of theater, as well as every student at CWRU that attends our productions. In fact, this project would create new positions in the world of theater as you would need a traditional Stage Manager to facilitate the production and you would need a Projection Manager to facilitate the viewers experience.

Due to the technological limitations of Eldred Theater (built in 1932), our department has not been able to attract students who are interested in engaging with the newest in theater technology. Lumination Station will allow our department to attract students who are interested in exploring advances in projection technology, as well as other technological advances in the world of theater.

III. Evidence of Project Goals & Student Learning

What evidence will you seek to collect and analyze to determine how well or to what extent project goals were achieved? How will you measure evidence of student learning and/or teacher change?

There are several opportunities for us to measure the how this project helps us to meet our learning objectives. The foremost learning objective of CWRU Theater is students creating live theater utilizing the skills and techniques they have learned in the classroom. To measure evidence of student learning utilizing Lumination Station, the CWRU department of theater will be creating and implementing a quantitative assessment process. Rubrics designed to evaluate the success of professional theater artists and productions will be used as the basis for how we judge our student's success with this project. These rubrics will be shared with our students in order to clearly define the successful achievement of learning objectives. In fact, the department of theater would reassess its current quantitative assessment strategies in order to clarify learning objectives for our theater students.

For qualitative assessments, we will create surveys for students that worked on productions before the use of this technology, and now with the technology, to gauge the worth of this technology. How easy is it to use? Does it create a 'live' theater experience? How willing would they be to use this technology in the future?

In addition to the recording, we will have Zoom analytics to determine how many people in the community were reached through the use of this technology. We would also create audience surveys to determine the level of their engagement with the production.

Evidence of teacher change will be gauged through a faculty survey to determine their comfort with the technology and if they plan to implement the technology in the classroom, or in production work. Students will also be surveyed on how they felt the professor used the technology.

IVa. Budget Narrative & Timeline

How will Nord Grant funds be used to support the project – for materials/equipment, for student stipends, or for something else? What support, if any, will the project receive from other sources, including on-campus (e.g. department funds) or beyond-campus (e.g. discipline-specific awards) funds? What is the proposed timeline for the project? Is this a new project or is the work already underway?

The Nord Grant Funds will be used to purchase projection software licenses and equipment, and pay a stipend to the developer of Lumination Station for his work consulting on the project. The projection software license, roughly $400, is a small one-time expense that will benefit the theater department for years to come. Again, as we move into our new building that will have more advanced technological capabilities, we will be ready to embrace and utilize the space. Once purchased, the students can use the equipment in a lab setting or during rehearsals and productions.

We will use a majority of the grant funding to pay a consulting fee to the developer of Lumination Station to assist in the implementation of the technology. They will be conducting learning seminars with faculty and students to introduce the software and equipment, as well as leading the design and implementation of the technology for a live production slated for November 2020. They have also agreed to work with a few of our students on their senior capstone projects in theatrical design.

Additional support for this project will be funded by the CWRU Department of Theater – department funds will be used to support the production design for the production (set/model building, light design, costume design, marketing, etc.). This production budget is in jeopardy of not being used if we are unable to find a creative way to bring live theater to our community and Lumination Station will provide that opportunity!

The proposed timeline is August 2020 to November 2020. In August 2020, we would begin the production design process and integration of Lumination Station into the production. Rehearsals and design meetings would occur during the process and the project will culminate with a live theatrical production online, and possibly live, if social distance guidelines allow.

This is a new project. The creator of Lumination Station and I have been tinkering with this project since the beginning of the quarantine and are excited to attempt a full production using the technology we are developing.

IVb. Budget Details

Expenses (*round to the nearest dollar amount*).

Software: Mad Mapper – this is a computer program that coordinates the direction and throw of multiple projections onto surfaces. https://madmapper.com/madmapper/	$ 400

Hardware: Graphics Expansion Module The [Triple Head2Go](#) allows multiple images to be projected from one computer. This hardware would be owned by department.	$ 315
Stipend: this stipend would be paid to the creator of Lumination Station for consulting, instruction, and implementation of the projection technology.	$3500
Total Nord Grant Expenses	**$ 4215**
Cost Sharing	
Production Costs: the Dept. of Theater will use its production budget to cover all the design elements of the production: set design, model build, costume design and build, light design and implementation, etc.	$ 4,500
Total Cost Sharing	**$ 4,500**
TOTAL PROJECT COST	**$ 8,715**