Corporate Sponsor Student Research Handbook CENTER FOR SUPPLY CHAIN RESEARCH® (CSCR®)

Penn State University



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INTRODUCTION

On behalf of the Department of Supply Chain and Information Systems and the Center for Supply Chain Research (CSCR) at Penn State, we would like to thank you for participating in our undergraduate student research program. Our students benefit tremendously from this experience and we hope that your company benefits as well.

The intent of this handbook is to give you some basic guidelines on how the student research project program is managed, what types of projects we accept, how the students are selected for the projects, and some suggestions on how to facilitate the student/company interaction. This handbook is not meant to be all inclusive, so if at any time you have questions about the program, please feel free to contact us.

PROGRAM MANAGEMENT

The student research program is managed exclusively by the CSCR. As the Faculty Director for Student Research, my role is to help set policy for the program and give general guidance on the research projects. Tracie Shannon, Administrative Director for CSCR, directly manages the student research program. Lauren Bechtel, who is on the CSCR staff, is responsible for the day-to-day management of the students and their research projects.

HOW ARE THE STUDENTS SELECTED?

The students selected to work on your research project will either be Schreyer Honors students or non-Schreyer students. Schreyer students must complete a senior thesis to graduate with honors. Schreyer students must also complete a minimum number of honors credits as well. One means to complete the honors credit requirement is to "honors option" a non-honors designated course. For example, if a student is registered for our fulfillment course and a research project focuses on some aspect of fulfillment, the Schreyer student can do the research project during the semester in the course and receive honors credits for the course.

The other pool of undergraduates used for the projects are non-Schreyer students who apply to CSCR to be considered for a project. Lauren Bechtel is responsible for interviewing and selecting these students for projects. The number of students from both pools selected is determined by the number/type of projects submitted.

HOW ARE THE PROJECTS ACCEPTED/ASSIGNED?

Once all of the projects have been submitted to CSCR, I will examine them to see which ones fit our criteria for acceptable projects (more on this in the next section) and what type of projects they can be: Schreyer theses, Schreyer honors options, or undergraduate research projects. Research projects are deemed acceptable as Schreyer theses if they can make a contribution to the existing body of knowledge in supply chain management and be completed using a robust methodology. These projects are broader in scope and typically take an entire academic year to complete. Projects are designated as honors option candidates if they focus on a particular area within supply chain management. These are more in-depth in scope and can be completed within the semester. The remainder of the accepted projects are assigned to one of our senior undergraduates to be completed during the semester they were submitted.

WHAT TYPES OF RESEARCH PROJECTS ARE ACCEPTABLE?

While there are many types of research projects you can submit to CSCR, the list below will give you an idea of the more commonly submitted projects. Before delving into a discussion of the types of projects, there are two items to note. First, if your firm requires a non-disclosure agreement (NDA), for the research, please remember that Penn State will not accept a company NDA. We have a Penn State approved NDA that is specifically designed for research projects like this and we can certainly provide on to you if you like. Second, if your project is selected as a Schreyer thesis, the thesis will be made publicly available by Penn State. However, if confidentiality is an issue, the student can request that a two-year "hold" be put on the thesis so it will not be available to the public for that two-year term. Any research project that is not a Schreyer thesis will not be made publicly available and will remain the property of the submitting company.

Best Practices

This type of research project typically addresses "best in class" practices for a particular process. The methodology usually focuses on research already publicly available and the student will synthesize the existing literature to identify the "best practices" in a particular area. The student might also interview executives in other companies to determine how they are performing a particular process. If this methodology is used, we require the student to provide a summary of results to not only the company submitting the project but also to the executives in the companies who were interviewed. All responses remain anonymous. An example might be what other companies are doing with corporate social responsibility practices. We **DO NOT**, however, allow students to interview executives to ask for data or metrics. So, please avoid submitting these types of projects.

Company Specific – Data Intensive

This type of research project is usually focused on a specific problem being experienced by a company and requires the company to provide data to the student for analysis. Of main importance to this type of project is the ability of the company to provide adequate data in a timely manner for the analysis. An example of this type of project might be an analysis to determine optimal shipping policies to a firm's customers.

Company Specific - Process Intensive

Again, this type of project is usually focused on a specific problem experienced by a company but is process, not data, specific. An example of this type of project might be an analysis of how to eliminate congestion on the receiving dock of a distribution center.

<u>Company Specific – Data and Process Intensive</u>

This type of project typically requires an in-depth analysis by the student since it incorporates both data and process aspects. An example of this type of project might be redesigning the picking area of a distribution center based on order profiles and shipping schedules.

Current Topics

These projects cover all of the remaining types of projects that might be submitted. Generally, these types of projects can involve data (publicly available) or publicly available best practices. Although not specific to your organization, these topics have some impact on how you conduct business. Two recent projects have been: 1) An economic analysis of the global natural gas industry; and, 2) An economic analysis of the labor pool in South Africa. So, as you can see, these topics are broad in nature and be completed using all publicly available sources.

SUGGESTED PRACTICES FOR MANAGING THE STUDENT/COMPANY INTERFACE

Our goal is to assign the best students to your projects so they can meet your expectations and help enrich their educational experience. Below are some "best practices" we have seen being used by companies that lead to the successful completion of your research project.

- When submitting a project, be sure to include the name and contact number of the subject matter expert (SME) within your company who will be working with the student to provide guidance.
- 2. Indicate on your submission the form of the deliverable(s): paper and/or powerpoint presentation.
- 3. Let us know when submitting your project whether or not an NDA will be required. We will send you the Penn State NDA so you can get it reviewed by your legal staff.
- 4. Once your project has been accepted and assigned to the student, we will set a conference call between a CSCR staff member, the student, and your SME to clarify the scope of the project and desired deliverables.
- 5. The student and your SME will then set a mutually agreed upon bi-weekly conference call for updates and issues. There will also be times when the student might need immediate advice on an issue and will reach out to your SME. Please encourage your SME to respond in a timely manner.
- 6. If the deliverable includes a powerpoint presentation, the student will coordinate with your SME for a time and date for the presentation.

We hope this handbook provides useful information on how to insure the successful completion of your research project. If you have any questions about the project process, please feel free to contact me at osv@psu.edu, Tracie Shannon at tla114@psu.edu, or Lauren Bechtel at lxv106@psu.edu. Once again, thank you for taking advantage of this opportunity to enrich the educational experience of our students.