

**Project Design Blueprint Exemplar
for
Course Design Institute:
Implementing Project-based Learning as an Inclusive Pedagogy
August 2022**

Course Title: INPR 1500: Security and Surveillance at Airport Checkpoints:
Balancing Safety, Convenience, and Efficiency

1. **Project Description** (Revised as needed) - A few sentences describing your idea of what students will do during the project.

Students will develop a proposal for the US Transportation Safety Administration (TSA), providing a plan to improve efficiency and passenger convenience while maintaining safety.

2. **Problem Statement** - A paragraph that describes the problem that this project will address. Includes why this problem is important and the impacts it is having on individuals, society, environment, physical objects or structures, personal finance or economics, politics, culture, etc.

Airports and airlines are sometimes targeted for terrorism and other forms of crime due to the large numbers of people in one place. Passenger screening

measures, such as X-ray machines, explosives detectors, and metal detectors exist to protect air travelers, airplanes, and airport property from such potentially dangerous situations. While these technologies and processes may promote airline safety, they can also have potentially negative impacts on traveler needs for personal comfort and privacy as well as airline industry business needs. The challenge is to design an ethical, effective, and efficient means for promoting safe air travel that considers and balances the needs of all stakeholders.

3. Key Concepts/Disciplinary Skills - The 3-5 main concepts or disciplinary skills that you intend for students to focus on learning through this project.

- Airline safety concerns
- Current federal and international policies related to travel safety
- US TSA roles and responsibilities
- Ethical issues related to passenger screening
- Passenger and airline efficiency needs
- Current screening measures, their strengths and weaknesses related to safety, efficiency, and ethics

4. Project Skills - 3-5 project-related or cross-disciplinary professional skills that you would like to foster through this project. Examples: Teamwork and collaboration, communication, problem solving, systems thinking, inclusivity/inclusive action.

- Perspective taking
- Teamwork
- Systems thinking
- Self-directed learning
- Project planning

5. Team vs. Individual Project - Specify whether this will be a team project or an individual project and why.

This will be a team project because of the high level of complexity of the project and lack of prior knowledge about the subject matter. Each team will work on the same project so that there can be some learning across teams as they see diversity in approaches and findings.

6. Student-Generated Deliverable - What students might produce to show how they have addressed the problem and what they learned through the project. Presented to peers, as well as the target audience, sponsor or partner.
Examples: Business plan, software application, media production, educational lesson or materials, a design.

The final products will be a written proposal (25-30 pages) to the US TSA and a class presentation summarizing the key findings and recommendations, along with reflections on the learning process. The proposal will include three sections: 1) Evolution and impacts of the problem, 2) What solutions have been tried, what has been more effective, what has been less effective, 3) the team's recommendations, including rationale for decisions, and potential impacts on each of the stakeholders.

7. **Potential Audience, Sponsor, or Partner** - Identify an authentic group or individual to help shape the deliverable, provide feedback, and ultimately be a consumer of the student deliverable. NOTE: At this point, you do not have to specify a particular person or organization, but rather the *general type* of audience, sponsor, or partner that you would like to be involved.

TSA

8. **Driving Question** - An actionable question that will drive students to find a solution to the problem. [Driving Questions Google Doc](#) utilized by participants in the Institute.

How can airports implement a more human-centered approach to airport security while balancing issues of safety and efficiency?

9. **Need to Know** - What the students need to know and be able to do in order to respond to the driving question AND produce the deliverable that you have described. This will give you some idea of the scope of your project.

- Who decides what the process is?
- What historical events have shaped the current protocols?
- What are the specific safety concerns?
- What technologies and processes are currently utilized?
- What are the strengths and weaknesses of current technologies and systems?
- Why is efficiency important? How is efficiency measured? How efficient are current systems and processes?

- What is meant by “human-centered” and why is this important?
 - What are other industries doing to screen their customers? (sports and concert venues, amusement parks, trains, etc.)
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Session 2 - Project Structure, Assignments, and Assessments

10. Breaking Down the Final Deliverable

Section Description	Weeks	Where/how the work should be submitted?
1. Making your case: Why change is needed (first draft) - students will describe the problem, causes, impacts, players, why it is important and to whom.	3	Submit document as an attachment on the discussion board. This will allow groups to easily access each others' work, exchange feedback, and learn from each other.
2. Evaluating current and past solutions - students will compare and contrast what has already been tried and provide an analysis of what has been most and least effective according to the standards (first draft) + submit revised version of Section 1.	4	
3. Your Solution - Students will provide a detailed description of their recommended solution to the problem, including the	4	

<p>rationale behind their decisions. They should build their arguments on facts they presented in the first two sections of the paper. This deliverable should also include their revised Sections 1 & 2.</p>		
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11. **Assessment** - What are the criteria that are important to evaluating your students' work, and what scale will be most useful for indicating strengths and weaknesses(e.g., Needs Improvement, Fair, Good, Excellent)? In the rubric template below, enter your criteria and scale. As you have time, add more details in the rubric.

PROPOSAL	Scale		
Criteria	Minimally	Moderately	To a Great Extent
Inquiry is comprehensive			
Analysis shows in-depth thinking			
Solution reflects systems thinking			
Solution is inclusive			
Solution incorporates multiple world views			
Writing is clear			

PRESENTATION	Scale		
Criteria	Minimally	Moderately	To a Great Extent
Presentation includes all required content			
Visual elements are used effectively to communicate key points			
Presenters clearly and confidently articulate key points in the visual presentation			

12. Feedback - Do the feedback cycles in the course template work for your project? If not, consider the following:

a. Who will provide feedback?

Myself and each team

b. When will the feedback be provided throughout the project?

When each section is due

c. How will the feedback be provided?

Teams will enter their detailed and specific comments in the proposals. They will also record a video providing overall feedback, including strengths, weaknesses, and areas for improvement.

d. What tools (if any) do you anticipate will be needed to help with the process?

NA

13. **Brainstorming Scaffolding Activities** - For each section of the project, indicate ideas for activities that could help students learn the content needed to complete the final deliverable. Consider the most complex and most concepts.

Section Project Work (copy from 10)	Potential Activities to Help the Students Complete the Section
Section 1: Making your case: Why change is needed (first draft) - students will describe the problem, causes, impacts, players, why it is important and to whom.	<ul style="list-style-type: none">• Each person in the group interviews 2 people in different age groups, gender, different backgrounds, political views, and different nationalities about their experiences with airport passenger screening. The group summarizes their findings, including differences, similarities, and patterns noted in experiences across gender, age, background, and nationality.• Create a concept map showing the relationship of the causes, impacts, and players.
Section 2: Evaluating current and past solutions - students will compare and contrast what has already been tried and provide an analysis of what has been most and least effective according to the standards (first draft) + submit revised version of Section 1.	<ul style="list-style-type: none">• Participate in a debate about the viability of provided example solutions, arguing from the perspective of one of the stakeholders (TSA, airline, passenger)
Section 3: Our Solution - Students will provide a detailed description of their recommended solution to the problem, including the rationale behind their decisions. They should build their arguments on facts they presented in the first two sections of the paper. This deliverable should also include their revised Sections 1 & 2.	<ul style="list-style-type: none">• Examine and discuss the quality of arguments and rationale in provided sample papers.

Session 3 - Working with the Course Template and Supporting Student Teamwork

1. **Team Configurations** - How might you configure your student teams for diversity?

I will have students complete an asset mapping exercise and then configure groups to ensure diversity in background, skills, and interests.

2. **Teamwork Survey** - What modifications (if any) would you make to the sample teamwork survey?

NA

3. **Completing your Course** - Create a project plan for yourself to finish populating the course shell.

Task to Do	Target Completion Date	Resources/Support Needed
Meet with CATLR team member		
Finish fleshing out the assignments with due dates and detailed instructions		
Develop a syllabus		

Upload and link resources		
Make the description of the project on the home page sound more compelling.		
Finish the rubrics for the paper and the presentation		