

# Integrating Safety Into Academic Programs At Rensselaer

## School of Engineering Safety Committee

Presenters:

**Sam Chiappone**

Manager, Fabrication and Prototype Facilities

**Junichi Kanai**

Associate Director-MDL

**Will Fahey**

Manager of Professional and Organizational Development



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## Introduction

- Who We Are
- About Our Committee
- About Rensselaer's SOE Programs



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## 5 Core Principles

1. Addressing Safety Program Challenges in Academic Environments
2. Educational Value for Students
3. Collaboration of Faculty/Staff/Students
4. Safety Integration/Risk Analysis
5. Development of Standard Safety Procedures and Safety Quiz


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## Nature of EHS in Academia


- Alignment with Pedagogy of the Coursework
- Command and Control Not an Option
- Collaboration- “Buy In” Personal Responsibility
- EHS Program Flexibility
- Valued Part of the Educational Experience



Will Fahey 4

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<h2>Educational Value of EHS</h2>	
<p>By focusing on safety aspects early in a given project, we students can adopt a safety mindset, such that we become more proactive in looking for and eliminating potential safety problems; in many cases, hidden dangers within a given project will be more readily recognized and worked around once people know what to look for. (In design projects specifically, it is critical to plan safety features before the design is finalized, which can often happen within the first few weeks of the project; retroactive application of such safety measures to a product after design is finished has the potential to cripple the effectiveness of the design project.) ..... Integrating safety into the curriculum helps students apply safety in a precise and systematic manner, utilizing tools such as blade guards and MSDS sheets to be prepared for any dangers that come their way.</p> <p style="text-align: right;">-Christina Laskowski-Student MANE</p>	

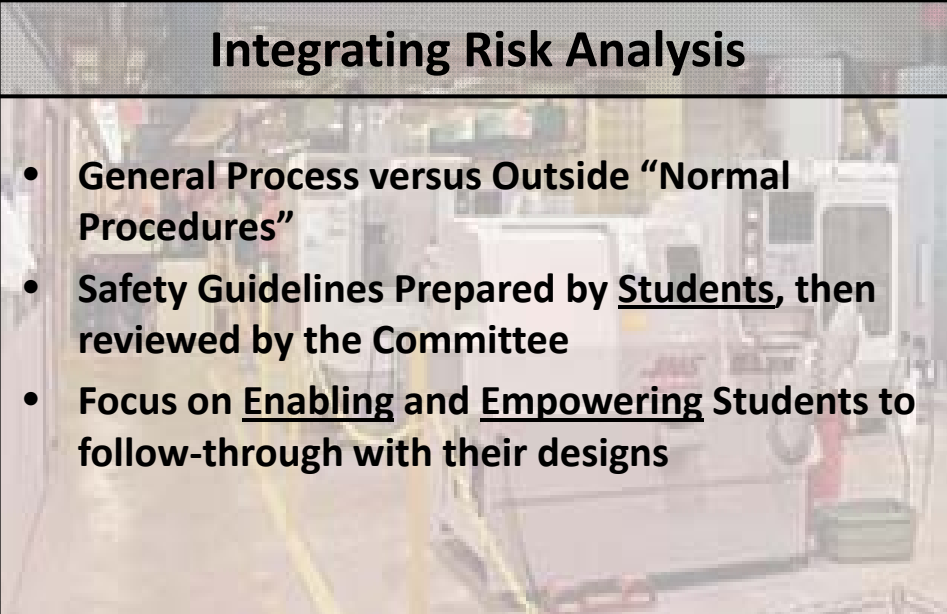
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<h2>Collaboration &amp; Personal Responsibility</h2>	
<ul style="list-style-type: none"> <li>• <b>Committee met with Faculty and Administrators on Course Design</b></li> <li>• <b>Developed 7 Initial Objectives</b></li> </ul> <ol style="list-style-type: none"> <li>1. <b>Develop a set of common policies for all shop areas</b></li> <li>2. <b>Develop a testing instrument</b></li> <li>3. <b>Clearly communicate policies to all shop users</b></li> <li>4. <b>Agree on a continuous monitoring/improvement system</b></li> <li>5. <b>Meet at the end of each semester to assess program</b></li> <li>6. <b>Promote the importance of safety awareness from an educational and professional career perspective</b></li> <li>7. <b>Share Information With Other Departments/Student Clubs</b></li> </ol>	
 <span style="float: right;">Sam Chiappone 6</span>	



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## Integrating Risk Analysis

- **General Process versus Outside “Normal Procedures”**
- **Safety Guidelines Prepared by Students, then reviewed by the Committee**
- **Focus on Enabling and Empowering Students to follow-through with their designs**



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## Case Studies

- **Paintball Gun**
- **Medical Instrument**



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## Communication/Testing

- Background/Challenges to Overcome
- Student Evaluation of Delivery Platforms
- [Rensselaer On-Line Learning Management System Demonstration](#)

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## Grade Book

Grades	Members	View All	Custom View	SCORM Grades
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