

IPRO 329 – Health Physics Training Simulation

Code of Ethics

Overreaching Principal: “Create a simulation that assists in effectively preparing potential health physics technicians in completing the oral component of their certification exam.”

1) Law

Canon: The team will ensure that all members who participate in human testing will be certified with IRB.

Pressure: To have enough members present at usability testing, the team may ask members who have not been certified to participate.

Risk: A volunteer tester may complain and accuse the team of harassment. This issue would be compounded if members present were not all certified.

Risk: Members who have not been certified are not as familiar with human testing and its risks, and are therefore more likely to make mistakes or cause harm to subjects.

Measure: The entire team is certified with IRB so everyone is eligible to work with testing.

2) Contracts and Agreements

Canon: The team will honor the consent forms signed by all of its volunteer testers, and will not divulge personal information or their opinions without their permission.

Pressure: The opinions of the testers may be used in a published report to convey information.

Pressure: The team may divulge names when dealing with other similar Department of Energy facilities.

Risk: The relationship of the team with the testers may be severed, and the testers may choose to pursue legal action for ignoring their confidentiality.

Measure: When participating in testing, each tester signs a consent form, and all personal information will be kept secret.

3) Professional Codes

Canon: The team will create a simulation that correctly promotes the professional behaviors of Health Physics Technicians, namely prioritizing human safety by using trained Health Physics Technicians as advisors

Pressure: To complete the game on time, the team may leave out crucial steps in the simulation scenario that would be pivotal in ensuring human safety during a radiation incident.

Risk: Health Physics Technicians who test or use the simulation may discredit it for ignoring fundamental rules of being a Health Physics Technician.

Risk: The simulation may not be an effective tool for training Health Physics Technician's.

Measure: The team has two Health Physics Technicians overseeing the design of the simulation to ensure that functionality regarding all human safety elements are incorporated into the simulation. In addition, these technicians work with the

designers to make sure that all professional behaviors of a Health Physics Technician are followed throughout the simulation.

4) **Industry Standards**

Canon: The team will adhere to the standards of training laid out by the Radiological Control Manual (RADCON) for potential Health Physics Technicians. This manual outlines the skills and knowledge necessary to be an effective Health Physics Technician. (<http://www-group.slac.stanford.edu/esh/documents/RCM.pdf>)

Pressure: To save time, members may not consult the RADCON manual and ignore important skills that RCT's are required to possess.

Pressure: The skills outlined in the RADCON manual may be too difficult to implement in the simulation, and may therefore be ignored.

Risk: The simulation may not incorporate industry standards necessary to be an effective tool for training and testing RCT's.

Measure: The team works closely with two Health Physics Technicians to make sure that each specification in the RADCON manual is followed.

5) **Community**

Canon: The standards of conduct within the Health Physics community will be strictly followed by adhering to the guidelines in the RADCON manual.

Pressure: The team may ignore deadlines and official deliverables in their attempt to complete the project.

Risk: Team members may not accomplish goals, or miss out on the overall scope of the project.

Risk: Without documenting work through the various reports, it will be harder for continued work on the project.

Measure: Access to RADCON manual and other industry materials are available to everyone for review. In addition, all project work materials are available to the team members at all times.

6) **Personal Relationships**

Canon: Team members will be respectful and communicate effectively with each other and any volunteer testers involved with the project.

Pressure: Team members may choose to work on tasks individually and ignore each other.

Pressure: Stress from various responsibilities may result in team members arguing and accusing one another of making mistakes.

Risk: Morale and overall productivity will be lessened through miscommunication and lack of listening

Measure: Team members communicate effectively, and tasks are completed on time, and successfully.

7) **Personal/Moral Values**

Canon: The team will not require any member or volunteer to perform any action that violates their personal code of morals or ethics.

Pressure: Some of the group may schedule work to be completed on a date that conflicts with team member's request for time-off due to a religious holiday.

Risk: A member could be required by the team to perform an illegal action, such as pirating copyrighted software, to meet the goals of the project.

Risk: A deliverable is not completed when last minute a team member is asked to work on a Saturday, but is unable due to a family funeral.

Measure: No team member is required to do more than another, or asked to do something that goes against their personal or morale values. In addition, team members are excused from class or work for any personal or moral issues that arise.