**Outcome:** Students Learn How and When to use Infrared Monitoring for Rounds or Troubleshooting

**Lecture:** Lecture to review:

1. Review Infrared Monitoring research done by students and discuss IR Monitoring
2. How and when to use IR monitoring vs. traditional thermocouples or RTD’s

**Demo:**

1. Hand On Hot Unit
2. Fluke VT04 IR Temp Gun

**Homework:**

*Using Microsoft word Student to do Research paper on Infrared Monitoring and the different types and uses of IR Monitors*

**Lab:**

1. Location: HOT Unit (GRHS)
2. How to use the VT04 IR Temp Gun to Gather reading from the hot unit and incorporate those readings into their Rounds sheet.
3. Students to identify on the Hot Unit which temperature based readings should be in the DCS vs. on a Rounds sheet and Explain why.
4. Students will Take Readings on the Hot unit to Verify temperature consistency between hot unit IR Readings and DCS thermocouples and explain why the values are different.

**Documentation:**

1. VT04 IR Temp Gun Manual
2. The Excel Rounds Sheet Created by Operators in Training.
3. Hot Unit Procedures

NP-DS4 NP-H1

NP-E1 NP-H2

NP-E2 NP-H3

NP-E NP-H4

NP-E4

**Competency Mastery:** Students will demonstrate mastery of Infrared monitoring by writing a descriptive paper on infrared monitoring and it uses along with demonstrating use of the shop infrared monitor VT04 IR Temp Gun and explaining how and why they use infrared, for monitoring on the Skid along with logging the information obtained from the IR Monitor in the Process rounds log sheets both base line numbers and ongoing verification numbers. Students will also master Competency through demonstration of hands on skills during Hot Unit Module exercises.