

NASSAU BOCES – ADULT EVENING PROGRAM
Joseph M. Barry Career & Technical Education Center
1196 Prospect Avenue
Westbury, New York 11590

COURSE OUTLINE

Course Name: Gas Burner

Weeks: 5

Sessions: 10

Days/Time: Tuesday/Thursday, 7:00 – 10:00 pm

Instructor: Dominick Conte

Required Textbook: None

Prerequisites: None

Adult Evening Office: (516) 622-6950

Course Overview:

This course introduces students to the principle of gas heating installation. There will be heavy emphasis on wiring and troubleshooting. Students will learn gas line sizing, vent sizing, and gas burner equipment. This is a Nassau BOCES *Green Certified* Course.

Related Certificate Program: Heating Systems Service Technician, which includes Oil Burner I, Oil Burner II, Plumbing I, Gas Burner and Hydronics. Total hours: 207.

Course Topics:

- Session 1** Introduction to: Gas terminology and safety, National Fuel Gas Code, gas burner components.
- Session 2** Gas line sizing and layout, pressure and pressure drops.
- Session 3** Fresh air requirements, venting sizing and layout (chimney).
- Session 4** Manometer and magnahelic gauges, orifice sizing.
- Session 5** Midterm exam, gas valves, burner design, and troubleshooting.
- Session 6** Types of systems: steam, hot water, warm air.
- System 7** Basic electricity, gas controls, relays, aquastats, transformers, zone valves.
- Session 8** Pictorial wiring diagrams and logic of various circuits.
- Session 9** High efficiency condensing boilers. Review for final exam.
- Session 10** Final Exam