Fundamentals of Explosives at URI; April 30-May 2, 2019 **Tuesday, April 30, 2019** URI Student Union-Atrium 1

8:30 AM Registration & Coffee & Donuts

9:00 **Basic Principles** – Dr. Jimmie Oxley burning and detonation, explosive trains, history

10:15 Break

10:30 **Chemistry of Military Explosives** - Oxley explosophors, explosive formulations, preparations, safety

Noon Lunch on your own

1:00 PM **Shock Waves in Solids** – Dr. James Kennedy shock formation, mechanics, interactions, phenomena

2:30 Break

2:45 **Detonation & Initiation** – Kennedy detonation theories, detonation phenomena, shock initiation of HE, hot spots, combustion, DDT

5:00 Adjourn for the day

6:30 PM Dinner Spain's of Narragansett (1144 Ocean Rd, Narragansett, RI 02882)

Wednesday, May 1, 2019 URI Student Union- Beaupre 105

8:30 AM Coffee & Donuts

9:00 AM **Explosive Output: Modeling & Calculations** - Kennedy Output measures and Gurney model for driving metal; codes 10:00 *Break*

10:15 Homemade Explosives & Peroxides--Oxley

Noon Lunch on your own

1:00 PM **Explosive Devices** - Kennedy Detonators, low-explosive devices, shaped charges, linear explosives

2:30 Break

2:45 **Shock & Detonation Physics** – Dr. Maurice Marshall explosive performance and output by hand

3:45 **Forensics** -- Marshall

5:00 Adjourn for the day

Fundamentals of Explosives at URI April 30-May 2, 2019 (cont) **Thursday, May 2, 2019** URI Student Union- Ballroom

8:30 AM Coffee & Donuts

9:00 AM **Hazards** – Dr. Blaine Asay Hazards & protocols of working with explosives

10:30 Break

10:45 Hazards (cont'd) - Asay

Noon Lunch on your own

1:00 PM Hazards (cont'd) -- Asay

2:00 PM **Detection of Explosives** - Oxley

3:00 Lab Tour

4:00 Class adjourns

