

Weaponneering Course

Instructor: Professor Morris Driels, Naval Postgraduate School

Course Description:

This 2 1/2 day short course is based on a very successful graduate-level weaponneering course developed by Professor Driels and taught at the Naval Postgraduate School, Monterey, CA. The course will provide an overview of the fundamentals of the weaponneering process and its application to air-to-surface and surface-to-surface engagements. The course explains the analytical basis of current weaponneering tools known as the Joint Munitions Effectiveness Manuals (JMEM's) produced by the Joint Technical Coordinating Group for Munitions Effectiveness (JTTCG/ME). The JMEM's are used by all Services to plan offensive missions and allow the planners to predict the effectiveness of selected weapon systems against a variety of targets.

The short course is divided into three parts.

Part I covers the basic tools and methods used in weaponneering:

- The weaponneering process
- Elementary statistical methods
- Weapon trajectory
- Delivery accuracy of guided and unguided munitions
- Target vulnerability assessment

Part II covers the weaponneering process for air-launched weapons against ground targets:

- Single weapons directed against point and area targets
- Stick deliveries (point and area targets)
- Projectiles (guns and rockets)
- Cluster munitions
- Weaponneering for specific targets: bridges, buildings etc.
- Collateral damage modeling

Part III covers the weaponneering process for ground engagements:

- Indirect fire systems – artillery and mortars.
- Direct fire systems – infantry and armored vehicles.
- Mines – land and sea.

About the Instructor:

Morris Driels is a Professor of Mechanical Engineering at the U.S. Naval Postgraduate School (NPS) in Monterey California. He has worked with the JTTCG/ME on a variety of topics in support of the JMEM's for a number of years. He has taught a quarter long weaponneering course at NPS for several years and has published a text book on the subject.

Security Classification:

The course is unclassified but is Export Controlled and attendance is limited to U.S. citizens only.

Handout Material:

Each student will receive a textbook and a set of handouts which cover the material presented.

For additional information, contact Ms. Mary Priore 315.339.7135 mpriore@alionscience.com http://wstiac.alionscience.com/training

Notice: WSTIAC reserves the right to cancel, change the course schedule, and/or instructor if required. In the event of a schedule change or cancellation, the customer will be immediately informed.