

THE NCO LEADERSHIP CENTER of EXCELLENCE
Master Leader Course (MLC)

M442: Operational Art and Design
Advance Sheet

1. SCOPE:

This lesson enables leaders to understand Operational Art, Operational Design, the Elements of Operational Design, the relationship between campaigns and major operations, and develop an operational approach to solve problems. The lesson also covers the elements of operational design including: Military End State, Objectives, Effects, Center of Gravity, Decisive Points, Lines of Operation and Lines of Effort, Direct and Indirect Approach, Anticipation, Operational Reach, Culmination, Arranging Operations, and Forces and Functions. Leaders will delve into assessments including Measures of Performance (MOP) and Measures of Effectiveness (MOE). This lesson provides foundational knowledge required for the M444 lesson – Joint Planning Process. At the end of this lesson, the learner will be able to use operational art and operational design to develop an operational approach to an ill-structured problem.

This lesson links with the following lessons: M446 Decisive Action Training Environment (DATE) Overview, M433 Critical Thinking and Problem Solving, M403 Effective Military Communication, M440 DoD Strategies, M444 Joint Planning Process and subsequent learning activities; it also prepares students for the Sergeant Major Course.

2. LEARNING OBJECTIVES:

MLC TLO 400-MLC-0440, Analyze U.S. Army and joint doctrine in order to draft and execute plans and procedures

ELO: 400-MLC-0440.02

Action: Analyze an ill-defined problem.

Condition: As a learner and senior leader attending face-to-face or virtual environments participating in dynamic, collaborative facilitated discussions, given references and multimedia resources.

Standard: Based on a scenario, summarize your findings:

1. Using operational art and operational design in problem solving;
2. Correlating adversary's centers of gravity with the problem to be solved; and
3. Developing measures of performance and measures of effectiveness.

Learning Domain: Cognitive

Level of Learning: Analysis

ELO: 400-MLC-0440.03

Action: Draft operational art and operational design.

Condition: As a learner and senior leader attending face-to-face or virtual environments participating in dynamic, collaborative facilitated discussions, given references and multimedia resources.

Standard: Based on a scenario, summarize your findings and address important considerations for the unit by:

1. Analyzing adversary's centers of gravity criteria; and
2. Testing the criteria against major operations.

Learning Domain: Cognitive

Level of Learning: Analysis

ELO: 400-MLC-0440.04**Action:** Identify enemy center of gravity (COG).**Condition:** As a learner and senior leader attending face-to-face or virtual environments participating in dynamic, collaborative facilitated discussions, given references and multimedia resources.**Standard:** Identify the critical capabilities, critical requirements, critical vulnerabilities and summarize how you would attack the center of gravity:

1. Using operational art and operational design methodology; and
2. Constructing a quad chart to assess a Center of Gravity.

Learning Domain: Cognitive**Level of Learning:** Analysis**3. PREPARATION FOR CLASS:****a. Complete:** *JP 3-0 Joint Operations course started in M400*

<https://www.jcs.mil/Doctrine/DOCNET/JP-3-0-Joint-Operations/>. This course is a general overview of fundamental principles for joint operations and the application of operational art and design in the planning execution, and assessment of joint military operations. Course describes a systems perspective for organizing for joint operations. YOU ARE NOT REQUIRED TO TAKE THE EXAM. Undergraduate college credit is available, free of charge, for the successful completion of any DOCNET course and its accompanying exam. The American Public University System, a nationally accredited online university system, will grant one undergraduate credit hour in the military science category for each DOCNET course completed. Select College Credit from the menu to learn more. Note: Availability of this service does not imply an endorsement or sponsorship by the Department of Defense. Time required varies based on the student's purpose:

- Overview (2.0 hours) Total course runtime without assessment.
- Overview with self-assessment (2.25 hours) Total course runtime including course exam.
- Education course (6.0 hours) total course runtime including course examination and reading of all primary and supplementary references.

Note: If there are issues with the course link, Watch JP 3-0 Operations Podcast,

Part 1 of 2 (9:52 minutes) <https://youtu.be/hpSsn0unBKA> ,

Part 2 of 2 (8:12 minutes) <https://youtu.be/acf4YuJQ5WI> ,

and scan JP 3-0, Executive Summary, pp. ix thru xxxviii (19 pages) for updated terms. Found at <https://jdeis.js.mil/jdeis/index.jsp?pindex=2> (CAC Required) > Approved Version column or Blackboard > Learning Materials > References Backup in the ZIP file.

b. Read (35 Total Pages):

- JP 5-0, *Joint Planning*, December 2020, pp. xxii thru xxiv, Operational Design - Executive Summary; Ch. 3, pp. III-9 and III-10 Section B; Ch. IV, pp. IV-1 thru IV-37, para 1 thru para 7a(2); pp. IV-40 thru IV-44, para 8 (34 pages). Found at <https://jdeis.js.mil/jdeis/index.jsp?pindex=2> (CAC Required) > Approved Version column

Note: If there are issues with the link, use the JP 5-0 PDF found on Blackboard > Learning Materials > References Backup in the ZIP file.

- ADP 5-0, *The Operations Process*, July 2019, p. 5-3, para 5-15 thru 5-17 (1 page). Found at <https://armypubs.army.mil/ProductMaps/PubForm/ADP.aspx> audio at https://rdl.train.army.mil/catalog/search?current=true&search_terms=audiobook

c. Scan (15.5 Total Pages):

- JP 5-0, *Joint Planning*, December 2020, pp. IV-37 thru IV-40, para 7a(2a) thru 7b(4) (3.5 pages). (Found in same location as above)

- *M442 IAD Scenario and OE Tools Handout* (11 pages). Found on Blackboard > M442 Learner Handouts
- *M442 OE Crosswalk Handout* (1 page). (Found in same location as above)

d. Be prepared to discuss the following in class:

- What is the bottom line of developing the operational approach? JP 5-0 p. III-9 Section B and p. IV-14 para 3f
- What does strategic guidance mean at your level? JP 5-0 p. IV-3, para 3a
- Explain JP 5-0 Figure IV-1 Understanding the Operational Environment Inputs and Outputs. JP 5-0 p. IV-7
- At the operational level, or the tactical level, how do you determine an adversary's Center of Gravity (COG)? JP 5-0 p. IV-22, para 4c

4. HOMEWORK ASSIGNMENT(S): None.

5. ASSESSMENT PLAN: Refer to ISAP.