

Helicopter Flight Maneuver1

Syllabus Number

2E128

Basic Major Subjects

Elective Requisites 2
credit

IMAI, Michio

1. Course Description

Students need to know the basics and how helicopter flies. Next, study overall maneuverings, performance, systems, and operational limit. Mainly, this course is in a lecture style, but practical training may be held as needed.

Learn knowledge related to DP2.

2. Course Objectives

The objective is learning necessary and fundamental subjects of a helicopter pilot such as, aero characteristics, mechanism, flight characteristics, and basic handling.

3. Grading Policy

Students are evaluated by the result of the exam (80%) and quizzes (20%).

The answer of each quiz will be explained.

4. Textbook and Reference

Textbook

Helicopter Flying Handbook

JAEA, ISBN978-4-902151-86-2

Reference

AIM-J JAPA, ISBN978-4-931160-02-6

5. Requirements (Assignments)

Please review the assigned vocabularies in notebooks, prior to each class (1hour).

Learn the necessary knowledge of practical training in 2nd term of this course.

Review and organize the knowledge in notebooks (2hours).

6. Note

Quizzes will be held as needed.

7. Schedule

- [1] Learn basic knowledge of aviation (Longitude/latitude, Time, aeronautical chart, altitude, speed and scales like QNH).
- [2] Learn about helicopter.
- [3] Learn basic vocabularies of aerodynamics.
- [4] Learn basics of helicopter's aerodynamics.
- [5] Learn aerodynamics on flight.
- [6] Learn flight control system of helicopter.
- [7] Learn other systems of helicopter.
- [8] Learn the System of Robinson R22.
- [9] Learn the flight manual and operational limits.
- [10] Learn the flight manual, emergency procedures, normal operations.
- [11] Learn the flight manual, weight, and center of gravity.
- [12] Learn the flight manual, factors affecting helicopter's performance.
- [13] Learn helicopter's emergency situation.
- [14] Learn basic maneuvering and hovering.
- [15] Overview / Final Exam