Flight Performance and Planning EASA Syllabus (May 2019)

EASA publish the syllabus for each of the nine ground school subjects. Shown below is the extract that PPLmentor.com is based on. The original can be found by searching for 'Easy Access Rules EASA Part-FCL'

7.	**FLIGHT PERFORMANCE AND PLANNING**
7.1.	**MASS AND BALANCE: AEROPLANES OR HELICOPTERS**
	Purpose of mass and balance considerations
	Mass limitations
	Importance in regard to structural limitations
	Importance in regard to performance limitations
	CG limitations
	Importance in regard to stability and controllability
	Importance in regard to performance
	Loading
	Terminology
	Mass terms
	Load terms (including fuel terms)
	Mass limits
	Structural limitations
	Performance limitations
	Baggage compartment limitations
	Mass calculations
	Maximum masses for take-off and landing
	Use of standard masses for passengers, baggage and crew
	Fundamentals of CG calculations
	Definition of centre of gravity
	Conditions of equilibrium (balance of forces and balance of moments)
	Basic calculations of CG
	Mass and balance details of aircraft
	Contents of mass and balance documentation
	Datum and moment arm
	CG position as distance from datum
	Extraction of basic mass and balance data from aircraft documentation
	BEM
	CG position or moment at BEM
	Deviations from standard configuration
	Determination of CG position
	Methods
	Arithmetic method
	Graphic method
	Load and trim sheet
	General considerations
	Load sheet and CG envelope for light aeroplanes
7.2.	**PERFORMANCE: AEROPLANES**
	Introduction
	Performance classes
	Stages of flight
	Effect of aeroplane mass, wind, altitude, runway slope and runway conditions
	Gradients
	SE aeroplanes
	Definitions of terms and speeds

	Take-off and landing performance
	Use of aeroplane flight manual data
	Climb and cruise performance
	Use of aeroplane flight data
	Effect of density altitude and aeroplane mass
	Endurance and the effects of the different recommended power or thrust settings
	Still air range with various power or thrust settings
7.3.	**FLIGHT PLANNING AND FLIGHT MONITORING**
	Flight planning for VFR flights
	VFR navigation plan
	Routes, airfields, heights and altitudes from VFR charts
	Courses and distances from VFR charts
	Aerodrome charts and aerodrome directory
	Communications and radio navigation planning data
	Completion of navigation plan
	Fuel planning
	General knowledge
	Pre-flight calculation of fuel required
	Calculation of extra fuel
	Completion of the fuel section of the navigation plan (fuel log) and calculation of total fuel
	Pre-flight preparation
	AIP and NOTAM briefing
	Ground facilities and services
	Departure, destination and alternate aerodromes
	Airway routings and airspace structure
	Meteorological briefing
	Extraction and analysis of relevant data from meteorological documents
	ICAO flight plan (ATS flight plan)
	Individual flight plan
	Format of flight plan
	Completion of the flight plan
	Submission of the flight plan
	Flight monitoring and in-flight replanning
	Flight monitoring
	Monitoring of track and time
	In-flight fuel management
	In-flight re-planning in case of deviation from planned data