

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'

8.	AIRCRAFT GENERAL KNOWLEDGE
8.1.	AIRFRAME AND SYSTEMS, ELECTRICS, POWERPLANT AND EMERGENCY EQUIPMENT
	System design, loads, stresses, maintenance
	Loads and combination loadings applied to an aircraft's structure
	Airframe
	Wings, tail surfaces and control surfaces
	Design and constructions
	Structural components and materials
	Stresses
	Structural limitations
	Fuselage, doors, floor, wind-screen and windows
	Design and constructions
	Structural components and materials
	Stresses
	Structural limitations
	Hydraulics
	Hydromechanics: basic principles
	Hydraulic systems
	Hydraulic fluids: types and characteristics, limitations
	System components: design, operation, degraded modes of operation, indications and warnings
	Landing gear, wheels, tyres and brakes
	Landing gear
	Types and materials
	Nose wheel steering: design and operation
	Brakes
	Types and materials
	System components: design, operation, indications and warnings
	Wheels and tyres
	Types and operational limitations
	Flight controls
	Mechanical or powered
	Control systems and mechanical
	System components: design, operation, indications and warnings, degraded modes of operation and jamming
	Secondary flight controls
	System components: design, operation, degraded modes of operation, indications and warnings
	Anti-icing systems
	Types and operation (pitot and windshield)
	Fuel system
	Piston engine
	System components: design, operation, degraded modes of operation, indications and warnings
	Electrics
	Electrics: general and definitions
	Direct current: voltage, current, resistance, conductivity, Ohm's law, power and work
	Alternating current: voltage, current, amplitude, phase, frequency and resistance
	Circuits: series and parallel
	Magnetic field: effects in an electrical circuit

	Batteries
	Types, characteristics and limitations
	Battery chargers, characteristics and limitations
	Static electricity: general
	Basic principles
	Static dischargers
	Protection against interference
	Lightning effects
	Generation: production, distribution and use
	DC generation: types, design, operation, degraded modes of operation, indications and warnings
	AC generation: types, design, operation, degraded modes of operation, indications and warnings
	Electric components
	Basic elements: basic principles of switches, circuit-breakers and relays
	Distribution
	General: bus bar, common earth and priority AC and DC comparison.
	Piston engines
	General
	Types of internal combustion engine: basic principles and definitions
	Engine: design, operation, components and materials
	Fuel
	Types, grades, characteristics and limitations
	Alternate fuel: characteristics and limitations
	Carburettor or injection system
	Carburettor: design, operation, degraded modes of operation, indications and warnings
	Injection: design, operation, degraded modes of operation, indications and warnings
	Icing
	Air cooling systems
	Design, operation, degraded modes of operation, indications and warnings
	Lubrication systems
	Lubricants: types, characteristics and limitations
	Design, operation, degraded modes of operation, indications and warnings
	Ignition circuits
	Design, operation, degraded modes of operation
	Mixture
	Definition, characteristic mixtures, control instruments, associated control levers and indications
	Propellers
	Definitions and general: aerodynamic parameters; types; operating modes.
	Constant speed propeller: design, operation and system components
	Propeller handling: associated control levers, degraded modes of operation, indications and warnings
	Performance and engine handling
	Performance: influence of engine parameters, influence of atmospheric conditions, limitations and power augmentation systems
	Engine handling: power and mixture settings during various flight phases and operational limitations
8.2.	INSTRUMENTATION
	Instrument and indication systems
	Pressure gauge
	Different types, design, operation, characteristics and accuracy
	Temperature sensing

	Different types, design, operation, characteristics and accuracy
	Fuel gauge
	Different types, design, operation, characteristics and accuracy
	Flow meter
	Different types, design, operation, characteristics and accuracy
	Position transmitter
	Different types, design, operation, characteristics and accuracy
	Tachometer
	Design, operation, characteristics and accuracy
	Measurement of aerodynamic parameters
	Pressure measurement
	Static pressure, dynamic pressure, density and definitions
	Design, operation, errors and accuracy
	Temperature measurement: aeroplane
	Design, operation, errors and accuracy
	Displays
	Altimeter
	Standard atmosphere
	The different barometric references (QNH, QFE and 1013.25)
	Height, indicated altitude, true altitude, pressure altitude and density altitude
	Design, operation, errors and accuracy
	Displays
	Vertical speed indicator
	Design, operation, errors and accuracy
	Displays
	Air speed indicator
	The different speeds IAS, CAS, TAS: definition, usage and relationships
	Design, operation, errors and accuracy
	Displays
	Magnetism: direct reading compass
	Earth magnetic field
	Direct reading compass
	Design, operation, data processing, accuracy and deviation
	Turning and acceleration errors
	Gyroscopic instruments
	Gyroscope: basic principles
	Definitions and design
	Fundamental properties
	Drifts
	Turn and bank indicator
	Design, operation and errors
	Attitude indicator
	Design, operation, errors and accuracy
	Directional gyroscope
	Design, operation, errors and accuracy
	Communication systems
	Transmission modes: VHF, HF and SATCOM
	Principles, bandwidth, operational limitations and use
	Voice communication
	Definitions, general and applications
	Alerting systems and proximity systems
	Flight warning systems

	Design, operation, indications and alarms
	Stall warning
	Design, operation, indications and alarms
	Display units
	Design, different technologies and limitations