Assessment Details and Submission Guidelines	
Assessment Type	Individual Assignment (to be submitted in Business Report format)
Assessment Title	Fleet Planning
Purpose of the assessment (with CLO Mapping)	**LO-1:** Make rational choices in aircraft selection **PLO: CS1/CS2** **LO-2:** Evaluate the global economics underlying fleet planning according to the market, constraints, and the airline's need **PLO: CS1/CS2/TS2** **LO-3:** Compute data to successfully carry out fleet planning analysis **PLO: KU3/CS1** **LO-4:** Propose an appropriate fleet type for a particular market **PLO:TS1/TS3**
Weight	70% individual assignment relating to an airline's fleet planning and airline's fleet strategy and implementation
Total Marks	100% scaled down to 70%
Word limit	**2,500 -3,500 Words**
Submission Guidelines	• All work must be submitted on Moodle by the due date along with a cover page. • The assignment must be in MS Word format, 1.5 spacing, 11-pt Calibri (Body) font and 2.54 cm margins on all four sides of your page with appropriate section headings. • Reference sources must be cited in the text of the report and listed appropriately at the end in a reference list using Harvard referencing style.
Due Date	submit your report on Moodle- Similarity Percentage should not exceed 20%

Fall 2025

Scenario:

You are working in the Fleet Planning Department of a commercial airline operator (fixed wing or rotary). Your operator is planning to launch a new route to a destination it is not currently serving. You have been tasked with writing a business report to senior management that will:

(1) identify a suitable destination and the appropriate aircraft and capacity to serve it

(2) identify and calculate key economic parameters to analyse the feasibility of the route

(3) make a conclusion for a go or no-go decision and recommendation on whether or not to launch, based on your analysis in (1) and (2) above and

(4) write a personal learning paper on your experience and learnings from this assignment and the overall module.

1. Airline and route selection, demand and revenue forecasts and aircraft allocation

- Choose an airline that you are familiar with and/or has a complete set of information easily available for research e.g. annual reports, fleet configuration etc. You can choose either a network/full service carrier or an LCC but your choice of route/destination/aircraft must be compatible with the airline's stated strategy.

- Choose a destination that is not currently served by your airline but has potential.

- Choose an aircraft: this can be a type that your airline currently operates or will start operating within the near future or it can be an entirely new type if you have nothing suitable already in your fleet plan.

- Check and ensure the aircraft you choose has the performance capability and configuration to serve the destination airport based on likely demand/frequency and payload requirements and the airfield/terminal configuration. If you choose an entirely new aircraft type take into account the challenges associated with the introduction of a new type of aircraft to your operation, such as training and transition, airport compatibility, configuration, maintenance overlap, spares etc.

- Estimate passenger and cargo demand over the sector by class both ways between your hub and the new destination. Note if you are a network airline each sector load will comprise demand from multiple origins onward to multiple destinations via your hub. Note that if you rely on this feed into your new route you will need to integrate the new flight into your existing schedule so that connections can be made over your hub airport. If you are a point to point or LCC you will have to rely on load generated by the two cities served only.

- Establish a schedule for the new route (frequency, timing) taking into account time zones, feeder traffic in both direction, minimum connect times across the hub, airport curfews etc.

- Calculate the yield, sector revenue (passenger and cargo), load factor, RASK for the new flight taking into account prevailing fares and cargo rates.

- Draw up the weight build up chart for the new flight to check your assumptions.

2. Key costs

- Identify, analyse and calculate the three main direct operating costs for the route i.e. fuel, crew cost (for both cockpit crew and cabin crew, based on regulatory and/or your airline service standards) and aircraft cost (cost of purchase/lease, depreciation).

- Identify and analyse two other significant direct operating costs associated with the new flight e.g. ATC/Navigation charges; ground handling charges; maintenance costs; inflight services etc. N.B. You need to ensure the costs are consistent i.e on a per flight hour, per cycle, per week, per month or per year basis and that your analysis is consistent with your demand and revenue forecast analysis above.

- Add in any other cost factors you see as being pertinent to a full analysis of direct/indirect operating costs e.g. marketing costs etc.

3. Conclusion and recommendation

- Make a go or no-go decision to launch the route based on likely success factors.

- Justify your decision with reference to the metrics we have used in the course.

- Identify any other information or analysis you would want to undertake to reinforce your analysis and decision.

4. Personal learning paper

- Write about the key learnings that you have gained from undertaking this module. From these discuss what you consider to be the three most important aspects of the Airline Route and Fleet Planning process and explain why they are important.

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Marking Scheme			
Assignment Component	**Marks**	**Main Activity**	**Learning Outcome(s)**
1. Airline, route & aircraft selection	5	Choose destination & aircraft; justify against airline strategy & capability	**LO4** (propose fleet type for a market)
2. Sector demand (passenger & cargo)	10	Forecast demand, evaluate revenue potential	**LO2** (market/constraints/economics)
3. Flight schedule & frequency	10	Build schedule around demand, constraints, curfews, connections	**LO2**
4. Yield, sector revenue, load factor, RASK	15	Economic modelling of route profitability	**LO2, LO3**
5. Weight build-up chart	5	Payload-range, aircraft performance check	**LO3**
6. Main DOCs (fuel, crew, aircraft)	20	Calculate key cost drivers per flight hour/sector	**LO3**
7. Two additional DOCs (ATC, handling, maintenance, etc.)	10	Extend cost evaluation	**LO2, LO3**
8. Additional costs (marketing, etc.)	5	Broader cost considerations	**LO2**
9. Conclusion & recommendation	10	Go/no-go decision on new route	**LO4**, supported by LO2 & LO3 evidence
10. Personal learning paper	5	Reflection, identify key learnings	Not mapped to LO2–4 (generic personal outcome)
11. Report quality (format, referencing, etc.)	5	Academic writing and research standards	Generic assessment criteria