Aviation 218
Commercial Ground School
5 Credits

Instructor: Mark Richardson
Phone: 253- 833-9111 ext. 4708
Email: mrichardson@greenriver.edu
Web Site: www.instruction.greenriver.edu/aviation
Course Section: DE
Office Hours: 5:30-6 p.m, 8:30-9 p.m. Tuesday and Thursday

Course Description:
Topics include navigation, weather, advanced aircraft performance, high-power engine operation, multi-engine factors, regulations, weight shift, instrument flight and communication, and airspace. Prepares students for the FAA Commercial Pilot written exam.

Course Content Learning Outcomes
The student will gain the necessary comprehension of those aeronautical subjects specified in Federal Aviation Regulation Part 61 for the Commercial Pilot, Airplane Category Rating. Course Completion Standards: The student will demonstrate through written tests, oral tests, and show through appropriate records that the knowledge, skill and experience requirements necessary to obtain a Commercial Pilot Certificate with an Airplane Category Rating and a Single-Engine land Class Rating.

Required course materials:

Commercial Pilot Study Guide containing FAA published examination questions and a current copy of 14 CFR Parts 1, 61, 91 and 830.

Flight Computer: E6B type computer or equivalent. May be an electronic version.


All materials are available in the Green River Community College Bookstore.

Seattle Sectional navigation chart

Student Code of Conduct:
Refer to GRCC catalog (2006-2008) pages 215-224
**Instructional method:**
Lectures, video presentations, computer data projector presentations, internet use, study assignments in-class exercises, quizzes and tests. 5 hours of flight simulator instruction is included and required for completion of class.

**Campus wide Outcomes:**
Green River Community College has identified ability areas that we believe encompass knowledge and are the most important skills, behaviors, attitudes, and values that students will need in order to be successful after leaving the college. Among these ability areas, this class will address Responsibility, Quantitative/Symbolic Reasoning, Critical Thinking, and Written & Oral Communications. Outcomes in these ability areas and where they will be demonstrated in your work are listed below.

**Responsibility:**
1. Student demonstrates a knowledge of and a willingness to accept stated/agreed upon expectations, policies, behavior, and procedures.
2. Student demonstrates accountability (punctual and ready to learn), integrity (does own work and pulls own weight in collaborative tasks), initiative (seeks help when needed), and tolerance (develops awareness of own biases).
3. Student actively and appropriately interacts with others respecting everyone's opinion. Demonstrated by preparedness for lectures and discussions, handing assignments in on time, and group accountability.

**Quantitative/Symbolic Reasoning:**
1. Student evaluates and interprets information / data.
2. Student recognizes which processes or methods are appropriate for solving a given problem, and correctly implements those processes.
3. Student demonstrates the ability to estimate a solution to a presented problem
4. Student translates data into various formats such as graphs, tables, formulas, and sentences. Demonstrated through your answers in class, on projects, homework, and tests.

**Critical Thinking:**
1. Student provides reasons for the conclusions they reach and assess the relevance and adequacy of those reasons.
2. Student connects past learning with current topics. Demonstrated through your explanations in class, on projects, assignments, and tests.

**Written & Oral Communications:**
1. Student demonstrates involvement with the material by expressing a clear sense of purpose, unity, and focus in their writing or speaking.
2. Student demonstrates clear organization of their thoughts in written and oral communications.
3. Student demonstrates well-organized and logical writing with correct grammar and spelling. Demonstrated in projects, test answers, and class and group participation.
**Special Needs:**
If you need course adaptations or special accommodations because of a disability, if you have emergency medical information, or if you have special accommodations that need to be shared with me in the event that the building needs to be evacuated, please contact me. If you use an alternate medium for communicating please let me know as soon as possible so that appropriate accommodations can be made. Disability Support Services is located in LSC 277 and may be contacted at: 253-833-9111, ext. 2631 or TDD at 253-288-3359.

**Course Outline:**

**Stage I**

Lesson 1 – Regulations  
Lesson 2 – Aeronautical Charts  
Lesson 3 – Navigation  
Lesson 4 – Cross-Country  
Lesson 5 – Airspace  
Lesson 6 – Human Factors  
Lesson 7 – Stage I exam

**Stage II**

Lesson 8 – Aircraft Systems  
Lesson 9 – Aircraft Performance  
Lesson 10 – Weight and balance  
Lesson 11 – Aerodynamics  
Lesson 12 – Emergency Procedures  
Lesson 13 – Stage 2 exam

**Stage III**

Lesson 14 – Aeronautical Decision making and Judgment  
Lesson 15 – Weather  
Lesson 16 – Commercial Operations  
Lesson 17 – Becoming a Certified Flight Instructor  
Lesson 18 – Stage III exam

Final Examination
Tests:

3 tests 100 points each 300
Flight Simulator Completion requirements 200
Final Test 200 points 200
700 points

Flight Simulator Requirements

1 hour – Basic Flight Procedures (stalls, steep turns, commercial maneuvers, as determined by the instructor)
1 hour – Basic Attitude Instrument Flying
1 hour – Complex System Operations
2 hours – Cross-country (VFR or IFR as appropriate to individual student)

Grading Policy:

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