Course Description:
This course covers basic aviation principles, such as time/distance/speed computations, weather theory, aircraft performance factors, Federal Aviation Regulations, navigation principles, basic flight planning and an introduction to aviation publications. The class is intended to provide the students with an understanding of basic aviation principles that will be expanded further in other aviation classes. In addition AVIA 101 will introduce the student to resources aviation professionals use in every day operations within the aviation industry to facilitating resource management in other aviation classes.

Required Materials for the Course:
Publications for the Class
- FAR/AIM - Current Year
- FAA PP Test Booklet (FAA CT 8080-2E)
- Sectional Chart – Seattle Sectional
- E6-b Manual Flight Computer
- NOTAM Booklet
- METAR/TAF Booklet

Additionally, you can find several other significant FAA Reference Publications the class will review (see list below). You can download copies of these publications from the www.faa.gov/atpubs website and the www.faa.gov/library/manuals/aircraft/ website.
Reference Publications
- FAA Manual 8083.3 - Airplane Flying Handbook
- FAA Manual 8083.21 - Rotorcraft Flying Handbook
- FAA Manual 8083.25 - Pilot’s Handbook of Aeronautical Knowledge
Learning Objectives:
At the completion of class, students should be able to explain, demonstrate and perform tasks relating to the basic principles professional aviation personnel use routinely. These tasks include data recognition, situation assessment of using fundamental problem analysis, problem solving and evaluation of outcomes pertaining to aviation.

Instructional Method:
Lectures, video presentations, computer data projector presentations, internet and study assignments

Student Code of Conduct:
Refer to GRCC Catalog (2007-2008)

Course Outline:

Week One and Two
Basic Concepts of Flight, Basic Aviation Calculations, Aeronautical Charts– Elementary Aerodynamics for basic aircraft control discuss aircraft types and uses of various aircraft based on aircraft performance, use of the E6-b flight calculator and Time-Speed-Distance Calculations using the E6b, Aeronautical Chart Orientation using the Seattle Sectional Chart (Latitude-Longitude references, Magnetic and True North Pole Orientation)

Weeks Three, Four, Five, Six and Seven
How to use Flight Publications – Civil Flight Rules/Federal Aviation Rules (CFR/FAR) and Introduce the Aeronautical Information Manual (AIM), brief overview of each Part and exercises to learn how to find information in the FAR and the AIM Introduction to supporting agencies including Air Traffic Control, Flight Service Stations, and other FAA functions, more Time-Speed-Distance calculations, Fuel calculations, Aeronautical Sectional Chart work for topography interpretation, how to use the Chart Legend chart symbology and exercises using chart details. Instruction on aviation navigation, plotting courses, flight planning considerations, airspace types uses such as Airways, Terminal Airspace and Special Use Airspace, pilotage navigation and radio navigation (VOR, ILS, GPS and ADF)

Weeks Eight, Nine and Ten
Introduce Basic Weather Concepts - Polar Front Concept, Highs, Lows, Fronts, and Aviation Weather concerns (hazards), introduce Aviation Meteorology (METAR) weather formats, Weather Charts, Reports and Forecasts, Density Altitude calculations Learn how to use the METAR Booklet, and work on Weight and Balance calculations, and Aircraft Performance Charts, and NOTAMS (Notices to Aviators)

Week Eleven
Review all topics prepare for the Final Exam.
Evaluation Standards, Grading & Academic Honesty:
Evaluation for grade will be via quizzes and exams. Evaluation for recommendation for work will be the total effort the student makes in class. The minimum overall percentage for passing is 62%. Cheating in any form will result in a zero score for the test and the student can not retake the test.

Testing, Test Make-up, Retakes & Grading
Students will receive ample warning of upcoming tests. Tests will be individual in-class closed book, team in-class open book and take-home open book. Students must arrange for Make-ups and Retakes with the instructor and use email to verify the coordination arrangements – students must provide a reason for missing a test and for retaking a test to the instructor. Testing Scoring for Grade is as follows:

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<th>Scheduled Day</th>
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<th>8 to 21 days after Scheduled Day or 3rd attempt (when allowed)</th>
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<td>Max Score 100%</td>
<td>Max Score 83%</td>
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*Make-ups/Retakes must be within 21 days of the scheduled day to count for score

Attendance/Absence/Tardiness Policy:
Expectation – Each student must do his or her best to be on time for every class. Some class absences are unavoidable. Work, special events and family and personal situations may result in a student not attending a class. If you miss a class, contact me so I can tell you what happened in your absence. If you can’t attend a class, please tell me beforehand so I can tell you what to prepare for. We test often in this class, so expect a test or quiz almost every day. If you miss class, make up missed work as soon as possible

GRCC decimal grading scale

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GRCC Campus-wide Outcomes:
Green River Community College (GRCC) identified specific fundamental knowledge, skills, behaviors, attitudes, and values that GRCC students must possess to be successful after leaving the Green River Community College environment, to wit:

1. **Student's sense of individual responsibility to the community**
   - Demonstrate knowledge of and willingness to accept stated/agreed expectations, policies, behavior, and procedures.
   - Demonstrate accountability (be punctual, prepared, ready to learn), integrity (do your own work, do your share of shared work), initiative (seek help when you need help), and tolerance (be awareness of your own biases). Actively and appropriately interact with others while respecting everyone's opinion.
   - Measured by occurrences of student readiness for class, participation in class, timely assignment submissions, and effective group membership.

2. **Quantitative and symbolic reasoning**
   - Student can evaluate and interpret information and data, can recognize which processes or methods are appropriate for solving a given problem, can estimate a solution, and correctly implements those processes.
   - Student can translate data into various formats such as graphs, tables, formulas, and sentences.
   - Measured by student work in class, on projects, homework, and tests.

3. **Critical Thinking:**
   - Student provides reasons for the conclusions he or she reaches and assesses the relevance and adequacy of those reasons.
   - Student connects past learning with current topics.
   - Measured by student work in class, on projects, homework, and tests.

4. **Written & Oral Communications skills suitable for the modern business environment**
   - Student becomes involved with the material and can express a clear sense of purpose, unity, and focus in his or her writing or speaking.
   - Student can organize of his or her thoughts in written and oral communications clearly and effectively using well-organized, logical writing and using correct grammar and spelling.
   - Measured by student work in projects, test answers, and class and group participation.

**Special Needs:**
If, because of a disability, you (the student):
- Needs special accommodations (adapt a course activity, have additional assistance, etc.),
- Has emergency medical information the instructor should know about, or
- Has a need for special assistance in the event of a building evacuation.
Please contact the instructor and be sure the instructor fully understands your special need. Students may use alternate modes to communicate Special Needs information (email, phone). In any case, and using any format, students should inform the Instructor as soon as possible after the start of school.

**Students should also contact Disability Support Services (DSS) in LSC 277**
**Phone DSS at: 253-833-9111, ext. 2631 or TDD at 253-288-3359.**