



Applied Baccalaureate Degree Program

Program Proposal

Green River Aviation

Bachelor of Applied Science  
Aeronautical Science

# BAS, AERONAUTICAL SCIENCE - DEGREE PROGRAM PROPOSAL

## Program Information

Institution

Name: Green River College

Degree: BAS, Aeronautical Science CIP Code: 49.0101

Name(s) of the existing technical associate degree(s) that will serve as the foundation for this program:

Degree: Commercial Pilot-Fixed Wing Option CIP Code: 49.0102 Year Began: 2014

Degree: Commercial Pilot-Rotor Wing Option CIP Code: 49.0196 Year Began: 2014

Degree: Airline Dispatch CIP Code: 49.0105 Year Began: 2004

Degree: Air Traffic Control CIP Code: 49.0105 Year Began: 1968

Degree: Airport Management CIP Code: 49.0104 Year Began: 2013

Degree: Air Transportation (management) CIP Code: 49.0104 Year Began: 1972

Degree: Unmanned Aerial Systems CIP Code: 49.0101 Year Began: 2015

Planned Implementation Date ( i.e. Fall 2014): Fall 2015

**Proposal Criteria:** *Please respond to all eight (8) areas listed in proposal criteria FORM D.*

**Page Limit: 30 pages**

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Date

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## AERONAUTICAL SCIENCE BAS DEGREE PROGRAM PROPOSAL

### Introduction

The dearth of Aviation Operations education programs in Washington State is the primary reason for Green River to propose creating the Bachelor of Applied Science (BAS) in Aeronautical Science. We are filling a void that needs filling. The Green River Aeronautical Science BAS degree will efficiently prepare Green River Aviation Department students for jobs in the Aviation Operations sector of the Aviation industry. Our graduates will vie for a broad spectrum of jobs in Washington State aviation and elsewhere in the US with knowledge and skills our graduates learned through completing the Green River Aeronautical Science BAS degree.

Aviation is a key industry in Washington State. Thousands of jobs and billions of dollars derive to the Washington State economy from Aviation. However, these jobs require applicants with very good skills and considerable technical knowledge – a tradition we have carried forward since the very beginning of Green River College stretching back to the 1960s with our AAS degrees. Adding the Aeronautical Science BAS to our existing portfolio of AAS degrees is a next logical step in an aviation student's education that strengthens our entire aviation education program and benefits students, employers and the Washington State economy all at the same time – a win-win-win. The Green River College Aviation Advisory Board guidance supporting the Aeronautical Science BAS has been very clear. Students who have four years of technical training are more attractive to employers who need to fill these highly technical jobs. Thus, creating the Aeronautical Science BAS is a very important step in helping Washington State aviation industry to ensure continued success for our state and for the US air transportation system regionally, nationally and globally. These jobs include:

- Aircrews – as Pilots for Fixed Wing and Rotor Wing flight operations
- Dispatchers - for Commercial Airline and General Aviation flight operations
- Air Traffic Controllers – controlling the nation's air traffic as part of FAA En Route Air Traffic Control Centers (ARTCCs), Terminal Radar Approach Control (TRACONS) facilities and Air Traffic Control Towers (ATCTs)
- Airport Managers and Staff working in Airports across Washington and the Pacific Northwest
- Local, regional, national and global Air Transportation System (ATS) Managers and Staff – working in a broad spectrum of critical aviation operations sector jobs and work environments
- The newly emerging and very exciting Unmanned Aerial Vehicle Systems (UAV/UAS) career areas that will have many opportunities in many other industries besides aviation

In creating the Aeronautical Science BAS, the Green River Aviation department addressed many criteria:

- Washington State education requirements
- Northwest Commission on University and College accreditation requirements
- Department of Education (DOE) federal funding support requirements
- Federal Aviation Administration (FAA) aviation operations requirements
- US Veterans Administration (VA) requirements
- Aviation Industry operational standards
- Collegiate aviation program norms

Satisfying these very stringent technical standards requires establishing program content that is strong and vibrant. At the same time, our program must address the types of students we hope to attract – we must strongly support a wide range and very diverse group of students. Within each AAS and BAS degree, we must constantly seek to meet the growing need for more qualified professional aviation operations personnel by focusing on individual merit. We must offer aviation education programs that will appeal to all students regardless of background. At the same time, while developing the skills and knowledge these students will

need to succeed, we must also ensure we are imparting to our students the absolutely critical role of aviation safety and the firm awareness that safety is paramount in aviation. Every Green River aviation graduate must develop a clear understanding that safety is always and must remain the ultimate goal in aviation operations. Educating to these very high standards has been a hallmark of our AAS degrees and is natural core value of the Green River BAS in Aeronautical Science. Our Aeronautical Science BAS degree proposal satisfies that most critical criteria – Safety must come first – always!

### **GREEN RIVER AERONAUTICAL SCIENCE BAS DEGREE PROPOSAL OVERVIEW**

The Green River Aeronautical Science BAS degree program proposal describes and explains these details:

1. Curriculum demonstrates baccalaureate level rigor
  - a. Program learning outcomes
  - b. Program evaluation criteria and process
  - c. Course preparation for students transferring with a technical associate degree
  - d. General education components
  - e. Junior and senior level course work in the BAS
2. Qualified faculty
  - a. Faculty profile of full-time and adjunct faculty
  - b. Total faculty FTE allocated to Aeronautical Science BAS
3. Selection and Admissions process
  - a. “Open door” admissions process
  - b. Efforts to assure support to diverse populations
4. Student services plan
5. Commitment to build and sustain a high quality program
  - a. Five year financial plan for the first five years of program operation.
    - i. Funds to be used to support the program
    - ii. Projected program expenses and revenues
    - iii. Facilities Green River Aviation will use to operate BAS
    - iv. Equipment, technology, and instructional resources for the program
  - b. BAS Program Administrative team
  - c. Integration of AAS and BAS programs
6. Program accreditation
7. Pathway beyond baccalaureate degree
  - a. Articulation agreements
  - b. Graduate program pathways
8. External expert program evaluation

#### **Criteria 1: Curriculum Demonstrates Baccalaureate-Level Rigor**

To ensure appropriate BAS level rigor and appropriate content coverage for BAS in Aeronautical Science, the Green River Aviation Faculty organized and structured the BAS degree using guidance from three primary sources:

- Two BAS DACUM Panels – one panel for Flight Operations, and another panel for Aviation Operations Management (see Attachment 1 and 2 DACUM Reports) for topic coverage
- A careful analysis of the current trends and the projected future needs of the aviation operations sector of the aviation industry

- An analysis of other baccalaureate-level programs - Green River modeled the BAS program from other well-established leading four-year Aviation Operations education programs across the US that represent high quality, excellent academic rigor and reflect current industry standards
  - Embry-Riddle Aeronautical University
  - University of Alaska-Anchorage
  - Central Washington University
  - University of North Dakota
  - Southern Illinois University
  - San Jose State University
  - Arizona State University
  - Kansas State University
  - Ohio State University
  - Oklahoma University
  - Purdue University

Sustainability is a key aspect within academic rigor for a program like the Green River Aeronautical Science BAS. Sustainability ties to education quality. To that end we planned a strong academic curriculum that includes the essential educational quality factors critical to achieving program sustainability. The Green River BAS in Aeronautical Science will:

- Develop a high level of professional technical knowledge so our graduates can compete successfully for jobs in the highly competitive aviation industry where state and regional employer have a great need for the skills sets and knowledge of these operations sector workers
- Fully satisfy Green River and SBCTC educational roles, missions, goals, objectives and program priorities regarding creating high quality education programs that produce a technically competent workforce that allow Washington State employers to compete successfully in global markets
- Fully satisfy FAA, VA, NWCCU, and DOE requirements for education organization, content and quality
- Fully satisfy place bound students needs for a path to a 4 year degree that provides those students the opportunity for better future earnings in a highly technical job.

#### **1. a. - Program Learning Outcomes**

PREPARING FOR A SPECTRUM OF JOBS IN AVIATION OPERATIONS – Using the information gleaned from the sources listed above, the Aeronautical Science BAS program will prepare students for employment in the Aviation Operations Sector of the aviation industry including:

- Pilots (fixed wing and rotor wing) working for Flight Operations companies such as Fixed Base Operators (FBOs), Air Carriers, Air Charter Operators, Air Cargo Operators, and other commercial flight operations
- Aircraft Dispatchers working for Commercial Air Carrier and Contract Flight Dispatching companies that support Washington companies as well as regional, national and global companies and corporations associated with or operating within the Aviation Operations sector of the Aviation Industry
- Air Traffic Controllers working for FAA in the US and for ATC facilities abroad including those nations that have national Aviation systems based on US standards in the application of Air Traffic Control use and procedures
- Air Transportation System Managers and Operators working for Airports and for Air Transportation companies where Aviation Operations technical knowledge is essential to perform Aviation Operations jobs safely and effectively
- Unmanned Aerial Systems (UAS) Operators working for companies operating UASs which would include Aviation industry companies and companies outside of Aviation whose primary business is not

aviation but, to keep those companies viable and competitive, will need trained specialists who can satisfy FAA UAS operations requirements

ACQUIRE ESSENTIAL AVIATION KNOWLEDGE - Aeronautical Science BAS graduates will acquire essential aeronautical technical knowledge that meets or exceeds Aviation Industry Operations Sector educational and job skill standards including highly technical aeronautical knowledge relevant to and in support of the Code of Federal Regulations (CFR) Title 14 Aeronautics and Space Regulations and Procedure including:

- Aeronautical Navigation Systems and Support
- Medical and other certifications and standards
- Air Worthiness rules, requirements and procedures
- Airspace, Air Traffic and General Operating Rules and Procedures
- Certification of Pilots, Flight Instructors, Air Traffic Controllers, Airline Dispatchers and other aviation professionals
- Commercial Air Carriers operations for Domestic and International Operations
- Airport Certification and Operational Requirements for Commercial Operations
- Aviation Operations special requirements including domestic and international aviation operations to the extent necessary to make the student competent for the job
- Operations for Unmanned Aerial Vehicles within domestic airspace

DEVELOP ESSENTIAL TEAM SKILLS - In Aviation, team work is essential and critical to ensuring safe operations. Therefore, we've planned team work skill development such as LOFT (Line Oriented Flight Operations – a DACUM recommendation) into our curriculum for both major degree tracks but especially for the Flight Operations track. The Flight Operations DACUM highlighted the need for more LOFT training and in response we've elevated the emphasis of LOFT in all Flight classes and Flight Ground Schools and reviewed and revised teamwork skill development to ensure every graduate has the requisite team skills necessary to succeed in building enduring careers in the aviation industry.

LEARNING OUTCOME SUMMARY – The Green River BAS degree in Aeronautical Science provides these important and in some cases critical education learning outcomes:

- For Green River Aviation students – Create a path to a 4-year Aviation degree on the west side of the Cascades that includes major disciplines within the Aviation Industry professional areas that are in high demand and will aid the student in achieving life and career goals
- For Green River College – Fully satisfies essential education roles, missions, and program priorities that are the reason Green River College exists
- For the SBCTC - develops programs to provide high quality education to produce a technically competent work force which helps Washington State employers to compete successfully in global markets which meets SBCTC goals
- For Washington State Employers – provides qualified Aviation professionals who can function effectively within the Operations Sector of the US National Air Transportation System (US NATS) and can fill jobs our employers need filled. The Green River Aeronautical Science BAS degree addresses, in some measure, the developing problem of insufficient numbers of available and qualified Aviation Operations workers.
- For existing Green River College Aviation Department Associate degree (AAS) programs – creating a 4-year Aviation degree that allows students to stay in place to complete a Bachelor's program. The two major disciplines within the BAS program provide educational efficiency necessary for Green River BAS in Aeronautical Science graduates to work effectively in a broad spectrum of Aviation Operations jobs.

- For our communities, the BAS in Aeronautical Science provides students from a wide variety of backgrounds the opportunity to complete the Green River BAS degree and compete successfully for valuable, vital jobs where individual competence and merit is the benchmark for success

### **1. b. Program Evaluation Criteria and Process**

ON-GOING PROGRAM EVALUATION – We will conduct ongoing, continuous operational program evaluation throughout the operation of the Aeronautical Science BAS, and also conduct a formal Program Assessment and Inventory (PA&I) two years after program start and again at five years after program start. The Aviation Industry is in a constant state of flux. Our aviation degree programs must keep pace with those changes in order to maintain validity and value to the student. Therefore, as a matter of course, the Aviation Faculty routinely solicits information about Industry needs, standards, methods and practices which we incorporate into the AAS degrees and will with the Aeronautical Science BAS degree just we have done for decades. The Green River Aviation Advisory Board (AAB) has played a key role in developing the Aeronautical Science BAS. Along with AAB suggestions and ideas, we also used DACUM panel guidance, from our efforts monitoring aviation industry trends, from reviews of other colleges and university aviation programs and from discussions with industry experts – all of these sources - to forge the new Green River Aeronautical Science BAS. We’ve used these same methods (except the DACUM) to assessing industry needs for the past 50 years. All our Aviation Degrees – AAS and BAS degrees – derive from industry needs. In this regard, the Aeronautical Science BAS is a natural and appropriate extension of our existing AAS degrees, and we will treat the Aeronautical Science BAS with the same rigor and critical assessment reviews that we’ve conducted since the Green River Aviation Department started back in the 1960s.

Green River has had a very successful aviation education program for this long time specifically because we do pay close attention to aviation industry needs and trends. Regular dialogue with our Aviation Advisory Board, with industry experts we meet at national trade and education conferences, with the many company executives we know and with other Aviation school faculties share knowledge with will continue just as before. All these vital information sources dictate our curriculum. As the Aviation industry changes, we must adjust to those changes to ensure our AAS and BAS graduates have the requisite knowledge and skills to work safely and effectively in the Aviation Industry. The companies, organizations and associations who provide industry input we use include:

- Alaska Airline, Horizon Airlines, Sky West Airlines and Kenmore Airlines
- The Regional Air Carrier Association (RACA)
- The Pacific Northwest Aviation Alliance (PNAA)
- The Pacific Northwest Defense Coalition (PNDC)
- The National Business Aircraft Association (NBAA)
- The American Association of Airport Executives (AAAE)
- The Association of Collegiate Training Institutions (ACTI)

These and other external experts who have in-depth aviation experience and higher education experience are part of our ongoing assessments of all our degrees and will be the same processes we will use for the Aeronautical Science BAS degree. In every case, we pay close attention to how each degree we offer ensures appropriate academic rigor, educational consistency, high level quality, effective educational methods and techniques, technical knowledge currency and accuracy, and most importantly- safety.

PERIODIC FORMAL PROGRAM REVIEWS - Green River conducts a formal Program Assessment and Improvement Review every five years and entails full assessments of every part of our programs including:

- Program Description
  - Enrollment trends
  - Student demographics



- Quarterly and Yearly enrollments
- Annual course offerings and cancellations
- Quarterly and Program course completion rates
- Employment opportunities and industry trends regarding employment
- Personnel summary: Before each quarter, we review carefully the courses that tenured and adjunct faculty will be teaching to ensure we have the proper mix and right experience amongst our teaching staff. We will continue that process for the Aeronautical Science BAS. Due to the number of specialty areas in the Aviation programs, getting the right technical specialist (who may be working in the industry) to teach a specific class in the Aviation program is very important
- Program curriculum – Annual Department review of CAR and PAR content currency and validity
  - Course Adoption Revision (CAR) status
  - Program Adoption Revision (PAR) status
- Course prerequisites – regular review of course prerequisites to ensure adherence to industry norms
- Program support – Quarterly Review of Program Support needs and resources
  - Instructional resources, special facilities and up-to-date equipment
  - Specific budget support and other specific program support services
- Learning outcomes – Annual Campus and Department Learning Outcomes Review
  - Campus-wide learning outcomes
  - Program-level learning outcomes
- Advisory committee and industry relations semi-annual Advisory Committee Meetings and ad hoc meetings for special items as necessary
  - Fostering community and business relationships that ensure effective AAB inputs
  - Political support within the industry to foster internships, career shadowing and connections between educators and the aviation industry
- Overall assessment of the program for effectiveness and validity – regular reviews (sometimes quarterly, sometimes annually) of overall program direction with regard to FAA, VA and Green River standards

**PROGRAM ASSESSMENT TOOLS** - The table below includes the various assessment tools the Aviation Department has used for Aviation Program Assessment.

<b>Assessment Tool</b>	<b>Assesses</b>
Student course evaluations	<ul style="list-style-type: none"> <li>● Satisfaction with knowledge, skills, theory, and course material and instruction level</li> <li>● Student readiness for upper level courses</li> </ul>
Student surveys	<ul style="list-style-type: none"> <li>● Program effectiveness meeting student expectations</li> </ul>
Aviation BAS degree program faculty surveys	<ul style="list-style-type: none"> <li>● Student efforts to learn material</li> <li>● Preparedness to teach the curriculum</li> <li>● Student readiness entering Aviation program</li> <li>● institutional and program resources effectiveness</li> </ul>
Institution program statistics	<ul style="list-style-type: none"> <li>● Student Statistics               <ul style="list-style-type: none"> <li>○ Enrollment trends</li> <li>○ Demographics and Diversity</li> <li>○ Program Retention and Persistence</li> <li>○ Course and program completion rates</li> </ul> </li> </ul>
Post-graduation student surveys	<ul style="list-style-type: none"> <li>● Effectiveness of program for               <ul style="list-style-type: none"> <li>○ Initial career success and progression</li> <li>○ Meeting employer expectations</li> <li>○ Income/salary/wage progression</li> </ul> </li> </ul>

Post-graduation employer surveys	<ul style="list-style-type: none"> <li>• Program effectiveness meeting employer expectations</li> <li>• Observed increased skills and performance</li> <li>• Perceived program strengths and weaknesses</li> </ul>
Cost Analysis of Programs	<ul style="list-style-type: none"> <li>• Program Viability</li> <li>• Alignment with Green River strategic planning goals</li> </ul>

**ASSESSMENT TIMELINE – “Planning Forward”**

NOTE- Purpose of “Planning Forward” schedule is to reduce budget shortfall as soon as possible

Date	Milestone	Action Required
5/7/2015	Project Start	Green River College
5/11/2015	Submit Accreditation Documents for Approval (Fast Track)	Green River College
5/16/2015	Begin Program & Schedule planning for 2015-2016 Academic Year – Plan 1 <sup>st</sup> year schedule starting 9/21/2015	Aviation Department
8/3/2015	Accreditation received ( <i>Estimated Date</i> )	Green River College
8/4/2015	Program Schedule announced ( <i>Estimated Date</i> )	Green River College
8/4/2015	Initiate VA Program Approval ( <i>Estimated Date</i> )	Green River College
8/4/2015	Recruiting targets confirmed	Aviation Department
8/5/2015	Program marketing begins	GRC MARCOM
8/5/2015	Program enrollments begin	Green River College
9/21/2015	Classes start – Program 1 <sup>st</sup> quarter start	Green River College
12/15/15	1 <sup>st</sup> quarter Program Evaluation	Aviation Department
12/16/2015	Apply Lessons Learned – Adjust 2 <sup>nd</sup> Quarter and subsequent quarters accordingly	Aviation Department
1/4/2016	Classes start – Program 2 <sup>nd</sup> quarter start	Green River College
2/29/2016	VA Program Approval received ( <i>Estimated Date</i> )	
3/21/2016	2 <sup>nd</sup> Quarter Program Evaluation	Aviation Department
3/22/2016	Apply Lessons Learned – Adjust 3 <sup>rd</sup> Quarter and subsequent quarters accordingly	Aviation Department
4/6/2016	Plan Academic Year 2016-2017 Program Adjustments	Aviation Department & Green River College
6/13/2016	3 <sup>rd</sup> quarter Program Evaluation	Aviation Department
6/14/2016	Apply Lessons Learned – Adjust 4 <sup>th</sup> Quarter and subsequent quarters accordingly	Aviation Department
6/27/2016	Classes start – Summer Quarter – quarter start	Green River College
7/11/2016	2015-2016 Academic Year - Full Year Operations Review - Conduct Top-to-Bottom Budget Review, update all recruiting targets, budget targets and academic plans accordingly	Aviation Department & Green River College
Summer 2016	Aviation Department will move to new building on D Street in Auburn near Auburn Airport	Aviation Department
8/22/2016	Conduct End of Summer Quarter review	Aviation Department
8/23/2016	Conduct Final Lessons Learned Review Incorporate adjustments to Academic Year 2016-2017 and commence planning 2017-2018 Academic Year	Aviation Department & Green River College

Thereafter, repeat the Review and Assessment Schedule at the end of each quarter – apply immediate changes as necessary and look forward to future year planning looking forward at least 1 full year ahead.

7/11/2017	Conduct Comprehensive Two year Look back to assess Budget, Recruiting and Systems adjustments and all aspects of BAS Aeronautical Science academic and other operations	
7/14/2020	Conduct Comprehensive Three year Look back to assess Budget, Recruiting and Systems adjustments and all aspects of BAS Aeronautical Science academic and other operations	

**1. c. - BAS Entry Criteria - Course Preparation for Students Transferring into Aeronautical Science BAS degree program**

The Aviation Faculty designed the Aeronautical Science BAS degree to provide a logical next step for Aviation Students who've completed AAS degrees. To facilitate educational efficiency we divided the BAS in Aeronautical Science into two major tracks to reflect the major operational tracks that exist in the aviation industry – those who fly aircraft and those who work in aviation operation jobs that support flying. The Aeronautical Science BAS Flight Operations track is a follow-on for the Commercial Pilot AAS which has two distinct components:

- Commercial Pilot - Fixed Wing option for fixed wing flight operations
- Commercial Pilot - Rotor Wing option for rotor wing flight operations

The Aeronautical Science BAS Aviation Operations Management track includes five flight-support AAS degrees:

- Airline Dispatch
- Air Traffic Control
- Airport Management
- Air Transportation management
- Unmanned Aerial Systems (UAS) operations

Students can apply to enter the Green River Aeronautical Science BAS program by showing degrees, class credits and Prior Learning Assessment (PLA\*) that match credit and material content GRC AAS degrees **(See Attachment B for a full listing of AAS degrees, classes and credits)**. Students can request to enter the Aeronautical Science BAS Aeronautical Degree program in advance of completing an AAS if there is a reasonable expectation the student will complete the AAS degree requirements prior to starting the first enrollment term for the BAS

\*PLA - Credit allocated by assessment of personal work experience such as working for an airline or presentation of a formal certification document such as a Federal Aviation Administration Pilot Certificate or Dispatch Certificate that demonstrates Federal or other Aviation Industry Standard skills, knowledge and first-hand experience

**Green River AAS Flight Operations Degree Requirements**

AAS Degrees		Credits				Total Credits
		Aviation Credits	Flight Credits	Non-Aviation	Electives Credits	
Commercial Pilot	Fixed Wing (FW)	60	15	20	10	105
Helicopter Pilot	Rotor Wing (RW)	60	21	20	10	111

**Green River AAS Aviation Operations Management Degree Requirements**

AAS Degrees		Credits			
		Aviation Credits	Non-Aviation Credits	Electives Credits	Total Credits
Aircraft Dispatch	AD	65	20	10	95
Air Traffic Control	ATC	83	20	10	113

Air Transportation	AT	75	30	10	110
Airport Management	APM	78	30	10	113
Unmanned Aerial Systems	UAS	60	20	10	90

1. d. – General Education Components:

*NOTE – **Bolded Italicized items** in the table below are part of the BAS for Aeronautical Science degree*

Area	Credits	Courses
Communication Skills	10	<b>ENGL 335 Advanced Technical Writing</b> and ENGL& 101 English Composition OR ENGL 126 Writing: Humanities OR ENGL 127 Writing: Social Sciences OR ENGL 128 Research Writing: Science/Engineering/Business
	5	CMST& 210 Interpersonal Communication, OR CMST& 220 Public Speaking, OR CMST& 230 Small Group Communication
Quantitative /Symbolic Reasoning Skills	5	MATH 106 OR MATH &107 OR MATH 108 OR MATH &141 or higher Math Class
Social Sciences	10	<i>10 credit elective not specified Students select from the list of Social Science courses approved for the AA-DTA degree</i>
Humanities	5	<b>PHIL 412 Professional Ethics</b>
	5	<i>5 credits upper-division Humanities Optional - CMST 338 Diversity in the Workplace OR Humanities, Fine Arts or English Classes from AA-DTA degree course list approved for Humanities, Fine Arts or English</i>
Natural Sciences	5	At least one 5-credit Natural Science course with a lab 100 level or higher
	10	<i>10 credits from AA-DTA degree approved Natural Science courses from List A or List B</i>
General Education Electives	5	<i>Classes from AA-DTA degree approved courses from List A or List B</i>
Total General Education Component Credits	60	

1. e. Course Work for Junior and Senior Levels in the Aeronautical Science BAS Program

The upper-division core requirements (300 and 400 level classes) for the Green River Aeronautical Science BAS program are listed below. A student attending full-time, approximately 15 credits per quarter, will be able to complete the Upper Division portion of the Aeronautical Science BAS program in 6-8 quarters.

- AVIA denotes an aviation academic class. FLT denotes an aviation flight training class. FOFW is for Fixed Wing pilots, FORW is for Rotor Wing pilots. Aviation Operations Management BAS Students can take FO classes as electives

- The # indicates a class requiring actual flight training. The carat sign (^) Indicates a course that satisfies an FAA Requirement for Restricted Air Transport Pilot (RATP) Certification

<b>Core Requirements – Flight Operations</b>	<b>Credits</b>
^ AVIA 300 (FO) – Certified Flight Instructor – Flight Instructor Ground School	3
# ^ FLT 311 (FOFW) – Certified Flight Instructor – Instructor Flight 1	2
# ^ FLT 312 (FOFW) – Certified Flight Instructor – Instructor Flight 2	1
^ AVIA 316 (FO) – Advanced Instrument Ground School	5
^ AVIA 320 (FO) – Multi-Engine, Turbine Engine & Advanced Cockpit Technologies Ground School	3
# ^ FLT 321 (FOFW) – Multi-Engine Operations Flight	1
# ^ FLT 324 (FOFW) – Turbine Operations Flight	1
# ^ FLT 326 (FOFW) – Advanced Cockpit Technologies Flight	1
^ AVIA 330 (FO) – Certified Flight Instructor – Multi-Engine, Turbine, Commercial, Advanced Cockpit Technologies, Instrument Instructor - Ground School	3
# ^ FLT 331 (FOFW) – Certified Flight Instructor – Multi Engine Flight	2
# ^ FLT 334 (FOFW) – Certified Flight Instructor – Turbine Flight	1
# ^ FLT 336 (FOFW) – Certified Flight Instructor – Commercial Pilot, Advanced Cockpit Technologies Flight	1
# ^ FLT 338 (FOFW) – Certified Flight Instructor – Instrument Flight Procedures	1
AVIA 360 – General Aviation Operations Management	5
^ AVIA 370– Aviation Safety Management System	5
AVIA 375 – ICAO Operations Standards	5
AVIA 400 – Airline Operations Management	5
AVIA 410 – Aviation & Aircrew Resource Management	5
AVIA 490 - Capstone: Aviation Research Projects	3
Total Aviation 300-400 level <i>Flight Operations</i> BAS credits	53
Total General Education credits	60
ELECTIVES – Electives from 100-400 Aviation catalog the academic advisor recommends	67
Total minimum Credits required	180

<b>Core Requirements – Aviation Operations Management</b>	<b>Credits</b>
AVIA 360 – General Aviation Operations Management	5
^ AVIA 370 – Aviation Safety Management System	5
AVIA 375 – ICAO Operations Standards	5
AVIA 380 – Aviation Business Management & Marketing	5
AVIA 385 – Airport Planning & Operations Management	5
AVIA 390 - Fleet Planning and Aircraft Acquisition	5
AVIA 400 – Airline Operations Management	5
^ AVIA 410 – Aviation & Aircrew Resource Management	5
AVIA 430 – Aviation Economics and the Global Economy	5
AVIA 490 – Capstone: Aviation Research Projects	3
Total Upper Division Aviation Operations Management BAS credits	48

Total General Education requirements	60
ELECTIVES – Electives from 100-400 Aviation catalog the academic advisor recommends	72
Total minimum credits required	180

## Criterion 2: Qualified Faculty

The real strength of the Green River Aeronautical Science BAS degree are the faculty members who bring extensive aviation experience, teaching skill and dedication along with a host of certifications and qualifications and real world experience pertinent to the course work each faculty member teaches. The wealth of experience and industry certifications that our faculty members have easily qualifies each as an Aviation Industry Subject Matter Expert (SME). Faculty may also have academic credentials and degrees that further strengthen our BAS program. Additionally, faculty and administrators who are responsible for the Aeronautical Science BAS degree program meet the Washington Administrative Code (WAC 131-16-091) certification requirements for professional and technical instructors and administrators. As we hire new faculty for the BAS programs in future years, we will specifically source those applicants who hold a master's or doctoral degree as a preferred qualification. Professional development funds of a minimum of \$5,000 per year will be set aside for currently employed faculty who teach in the BAS to achieve the next level of educational credentials from a regionally accredited institution. Faculty holding a bachelor's degree with 10+ years' or relevant work experience may teach 300/400 level coursework and will be strongly encouraged to continue to pursue a master's degree. To the extent that funds are available, GRC will strive to support those faculty members to attain those higher education levels.

<b>Faculty Name – By Alphabetical Order – Last Name - Full-time or Adjunct Faculty, Education Experience and Degrees, Aviation Industry Credentials and Teaching Credentials, Work Experience</b>	<b>Courses that fit faculty education profile</b>
<u>Ty Barnes - Tenured Philosophy Faculty, Professional Ethics</u> Education: PhD (ABD, Philosophy & Master of Arts, University of Kansas; Bachelor of Arts, Philosophy, Southeast Missouri State University; Final Thesis currently in progress as part of University of Massachusetts Doctoral Degree program, Amherst, MA; Teaching: Philosophy, Logic, Political Philosophy, Critical Thinking, Philosophy of Science, Introduction to Ethics, Environmental Ethics	PHIL 412 - Professional Ethics
<u>Jerry Marshall - Full time faculty, Campus eLearning Director, Research</u> Education: PhD, Clinical Psychology, University of Pittsburgh; Bachelor of Science, Mathematics & Psychology, University of Texas; Aviation Credentials and experience - FAA Private Pilot License, Instrument rated, Multi-engine rated; Teaching Background: Professor of Psychology for Green River psychology classes; Additional: Administrator of Green River eLearning programs, manage three software eLearning programs for eLearning class delivery; Extensive background experience training and teaching research methodology for doctoral programs in Clinical Psychology; Owned and operated private practice for Counseling and Guidance prior to working at Green River College	AVIA 490 – Capstone: Aviation Research Projects
<u>William (Will) Scott - Full-time Communication Studies Faculty,</u> Education: PhD (ABD), Communications, University of Utah; Master of Arts & Bachelor of Arts, Communications, California State University, Los	CMST 338 - Diversity in the Workplace

<p>Angeles; Specialize in Cultural Studies, Rhetoric, Research Methodology, Pop Culture Criticism. Doctoral Dissertation: Between Rage and Resistance: An argument in support of effective resistance in popular culture; Rhetoric, Post-structuralism, Critical Cultural Studies, Intercultural Communication; Curricula Development includes Critical Analysis of Media, Intercultural Communication, Introduction to Pop Culture, Argumentation, Diversity in the Workplace, The Art of Film, Contemporary US Cinema, Pop Culture: Movies and TV, Intro to Film; Recent Honors: Nominee for Distinguished Faculty Award, Green River College</p>	
<p><u>Michael S. Sealfon, Adjunct Faculty, Aviation</u>  Education: PhD (ABD) Ohio State University, Clinical Chemistry; Master of Science, University of Tennessee-Memphis, Clinical pathology; Bachelor of Science, Penn State University, Pre-Med; National Board Certified Laboratory Director: Aviation Credentials and experience - FAA Commercial Pilot License, Instrument Rated, FAA Basic Ground Instructor (BGI), FAA Advanced Ground Instructor (AGI), FAA Instrument Ground Instructor(IGI), Colonel US Army (Retired), Flew with Coast Guard Auxiliary 2003-2011 – 270 mission hours – 67 missions, earned several commendations; 1600+ total flight hours, 300+ Flight Instructor hours, Flown light single engine Cessna 150, 152, 172, 172 RG, 182, Piper PA 24, PA 28 Piper Arrow and Bell Jet Ranger; Teaching Background: Renton Technical College 2005-2013 (2 year break in service 2009-2011 due to state budget cuts); 2001-2002 for Northwest Aviation College, Chemistry and Physics; 2000-2001 for Green River Community College, Chemistry; 1986-88 for Lake Community College, Mentor OH - Clinical Chemistry &amp; Bio-Chemistry’ 1986-87 Cleveland State University, Chemistry; 1982-1986 Mt Sinai Hospital, Cleveland OH – Clinical Chemistry Lab; 1980-82 St Bonaventure University, NY, Chemistry and Clinical Affiliate; 1973-74 University of Tennessee-Memphis, Lab Chemistry; Additional: Work experience 2009-2012 – Medical Technical Lab Manager, Eastside Fertility Medical Technology, Bellevue WA; 2004-05 Medical Technical Lab Manager, Group Health, Kent WA,; 2003-2004 – Operations Manager, Comprehensive Toxicology Labs, Tacoma WA; 2001-2002 – Manager, Clinical Trials, UW Northwest Lipids Research Lab, UW-Seattle; 1988-2000 - Technical Director, LabCorp, Kent WA</p>	<p><u>AVIA 430 – Aviation Economics and the Global Economy</u></p>
<p><u>Joanne Landry – Adjunct Faculty – Aviation Safety Management System, Aviation Safety</u>  Education: Master of Business Administration (MBA), Executive Program, University of Washington; Master of Arts, Adult Education, Alaska Pacific University; Master of Arts Equivalent, Center of Applied Linguistics, Besancon, France (Rotary Scholar); Bachelor of Arts in French Linguistics, University of Santa Clara, Santa Clara, California: Aviation Credentials and experience - FAA Safety Management System (SMS) Phase I, Phase II, and Phase III Airport Pilot Program Lead Consultant, FAA SMS Phase III Implementation Studies Prime and Sub Consultant for six Airport SMS</p>	<p><u>^ AVIA 370 – Aviation Safety Management System</u></p>



<p>Study Airports including San Antonio International, TX &amp; Seattle-Tacoma International (SeaTac) WA</p>	
<p><u>Ariadne M. Rooney – Full Time Faculty – English Department</u>  Master of Arts in English, Eastern Washington University, Cheney, WA;  Bachelor of Arts in English, Summa Cum Laude, Eastern Washington University, Cheney, WA, emphasis in Literary Studies with Minors in Anthropology and Linguistics; English Instructor, Green River College (Fall 2013 – present)</p>	<p>ENGL 335 Advanced Technical Writing</p>
<p><u>Curtis (Curt) Scott – Tenured Faculty – ATC Courses, General Aviation Courses, Pilot Academic Courses, FAA Next Generation, Aviation Law, Aviation Security, Airport Operations &amp; Management</u>  Education: Master, Business Administration (MBA) International Business &amp; Marketing, Marymount University, Arlington VA; Master of Arts (MA), Psychology, Counseling &amp; Guidance, University of Northern Colorado, Greeley CO; Bachelor of Science (BS) Sociology, Social Research, University of Oregon, Eugene OR: Aviation Credentials and Experience - FAA Commercial Pilot License, Instrument Rated, Multi-Engine Rated, FAA Basic Ground Instructor (BGI), FAA Advanced Ground Instructor (AGI), FAA Instrument Ground Instructor (IGI), Retired Lt Col, USAF, USAF Command Pilot, USAF Special Operations Pilot, Aircraft Commander and Mission Commander; USAF Special Mission Pilot, Aircraft Commander and Mission Commander; USAF Advanced Jet Instructor Pilot for Advanced Jet Instruction and for Advanced Jet Pilot Instructor Training, Type Rated in Lockheed C130/L188(4 engine turboprop), MC130/L188, ConvairT29 /Convair330 &amp; 440 (reciprocating twin-engine), T38 Twin Jet Fighter-type Trainer (twin engine turbine); and light single engine Cessna 150, 152, 172, 182, Piper PA 24, PA 28 and Luscombe 8E (tail-dragger) aircraft, approximately 4,800 flight hours flight experience operating in US, North America, Central America, Europe, the Middle East and Asia. first flight in 1966, Managed ATC Facility the National Association of Air Traffic Controllers selected as Best Mid-sized Terminal ATC facility world-wide (Holloman RAPCON 1974)</p>	<p><u>AVIA 380 – Aviation Business Management &amp; Marketing</u>  <u>AVIA 430 – Aviation Economics and the Global Economy</u>  <u>AVIA 490 – Capstone: Aviation Research Projects</u></p>
<p><u>Jerry Wolfe – Full time Faculty – ATC Program Lead Instructor – BAS Faculty Chair</u>  Education: Master of Ministry, Pepperdine University, Malibu, CA; Master of Music, Webster University, St. Louis, MO; Bachelor of Arts in Education, Harding University, Searcy, AR; currently Lead ATC instructor for Green River Aviation Department – currently in the Green River College Tenure process, year two: Aviation Credentials and Experience - 24 years working as an Air Traffic Control Specialist Certified Professional Controller (ATC CPC) at Seattle Air Route Traffic Control Center (ARTCC); On-the-Job (OJT) Instructor, Seattle ARTCC; Airspace and Procedures liaison for Seattle ARTCC; Training Instructor for Seattle ARTCC; 6 years as a secondary education teacher; 4 years self-employed construction contractor</p>	<p><u>AVIA 430 – Aviation Economics and the Global Economy</u>  <u>AVIA 490 – Capstone: Aviation Research Projects</u></p>



<p><u>Coleman Boettger – Adjunct Faculty – Flight Operations, Airline Operations, Aviation Weather</u>  Education: Bachelor of Science, San Jose State University, 1982, Aeronautical Operations, Minor Business Management: Aviation Credentials and Experience - FAA Airline Transport Pilot (ATP) with Multi-Engine Land (MEL) type ratings conducting commercial air carrier operations under Federal Aviation Regulations (FARs) Part 121 with Type Ratings in McDonnell Douglas MD-80 and Boeing B737 turbojet aircraft and the Shorts 330 and DeHavilland DH2, DH3 and DH4 Piston and Turboprop aircraft. FAA Certified Flight Instructor (CFI), FAA Certified Instrument Flight Instructor (CFI-I), FAA Certified Multi-Engine Flight Instructor (CFI-MEI) FAA Gold Seal Flight Instructor for Airline Transport Pilot qualifications, FAA Basic Ground Instructor (BGI), FAA Advanced Ground Instructor (AGI), FAA Instrument Ground Instructor (IGI) with Total flying Time 25,300 Hours including 20,500 flight hours operating turbine aircraft and 3,800 flight hours operating piston and turboprop aircraft; 1987-1993 with Alaska Airlines- Captain (Pilot In Command) for 20 years flying McDonnell Douglas MD-80 and Boeing B737</p>	<p>^ AVIA 320 – Multi-Engine, Turbine Engine &amp; Advanced Cockpit Technologies Ground School  ^ AVIA 330 – Certified Flight Instructor – Multi-Engine, Turbine, Commercial, Advanced Cockpit Technologies, Instrument Instructor - Ground School  AVIA 360 – General Aviation Operations Management  AVIA 390 - Fleet Planning and Aircraft Acquisition</p>
<p><u>David Crowner – Adjunct Faculty – Airport Operations and Management, Airport Planning and Marketing</u>  Education: Bachelor of Science in Aviation Management, Southern Illinois University: Aviation Credentials and Experience - FAA Commercial Pilot, Instrument Rated, Certified Flight Instructor (CFI), Aircraft Rescue Firefighter, Accredited Airport Executive through the American Association of Airport Executives (AAAE- professional Airport Managers association that sets standards for Airport Operations), Certified by the Federal Emergency Management Agency (FEMA) as an National Incident Management Systems (NIMS) Incident Command System (ICS) operator in accordance with NIMS Standards 100, 200, 300, 400 and 700. February 2008 to present, Manager, Airfield Operations, Safety and Compliance, Seattle-Tacoma International (SEATAC) Airport</p>	<p>AVIA 385 – Airport Planning &amp; Operations Management</p>
<p><u>Paul Vandette – Adjunct Faculty – Airline Operations, Airline Business, Aviation Marketing</u>  Education: Bachelor of Science, Flight Technology, Central Washington University 1991, Graduated Cum Laude: Aviation Credentials and Experience - FAA Airline Transport Pilot (ATP) with Multi-Engine Land (MEL) type ratings conducting commercial air carrier operations under Federal Aviation Regulations (FARs) Part 121 with Type Ratings in McDonnell Douglas DC9, Boeing B737 and Dornier 328; FAA Certified Flight Instructor (CFI), FAA Certified Instrument Flight Instructor (CFI-I), FAA Basic Ground Instructor (BGI), FAA Advanced Ground Instructor (AGI), Total flying Time 8,000 Hours; 2012-present with Alaska Airlines- First Officer (FO) on Boeing B737 300, 400, 700 and 900 ER series aircraft, operating under FAA Part 121 Commercial Air Carrier operations in the US, Canada and Mexico.</p>	<p>AVIA 380 – Aviation Business Management &amp; Marketing  AVIA 390 - Fleet Planning and Aircraft Acquisition  AVIA 400 – Airline Operations Management</p>

<p><u>Chris Ward – Full time Faculty – Pilot Program Lead Instructor, FAA Chief Ground Instructor</u>  Education: Bachelor’s Degree, Economics University of Washington:  Aviation Credentials and Experience - over 16,000 flight hours spanning 30+ years; FAA Airline Transport Pilot (ATP) with Multi-Engine Land (MEL) type ratings conducting commercial air carrier operations under Federal Aviation Regulations (FARs) Part 121 with Type Ratings in Boeing B757, Boeing B767 and Airbus A320, and FAA Commercial Aircraft Single Engine Land (ASEL) and Aircraft Single Engine Sea (ASES) certifications; FAA Certified Flight Engineer with Turboprop powered, Turbojet powered ratings; FAA Certified Flight Instructor (CFI), Certified Flight Instructor-Instrument (CFI-I), FAA Basic Ground Instructor (BGI), FAA Advanced Ground Instructor (AGI), and FAA Instrument Ground Instructor (IGI)</p>	<p>^ AVIA 316 (FO) – Advanced Instrument Ground School  ^ AVIA 320 – Multi-Engine, Turbine Engine &amp; Advanced Cockpit Technologies Ground School  ^ AVIA 330 – Certified Flight Instructor – Multi-Engine, Turbine, Commercial, Advanced Cockpit Technologies, Instrument Instructor - Ground School  AVIA 375 – ICAO Operations Standards</p>
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**Criteria 3: Open Door Admissions Process**

Green River Aeronautical Science BAS program will continue the Green River “open door, we welcome all students” to support the local community, to support the diversity of the local people, and to align with the educational philosophy and operational procedures that we use for all our AAS degrees. We will extend the same model of “open to all, all are welcome” to the Aeronautical Science BAS. Entry requirements are straightforward and we will do our best to ensure that every student who wants to participate in the Green River Aviation Department BAS in Aeronautical Science will have an opportunity to do so. Green River has steadily demonstrated the ability to expand education opportunities for students seeking 4 year degrees. We’ve expanded our program from 80 FTE’s to over 300+ FTE’s in the most recent full academic year (2013-14). We’ve adopted a “flexible growth model” wherein we adjust our program growth to student demand for the program. Student demand coupled with employment demand allows us to add classes and expand our programs accordingly using the “open door policy” which dovetails with our strategic planning for student equity and access. To that end, we are planning to allow students to enter our BAS program if the student is within 10 credits of meeting the AAS completion criteria. We will admit those students into the BAS program on a *provisional* basis which will allow those students to take 100-200 level coursework to meet the entry requirements. We will closely monitor the progress of each *provisional* student to ensure those students will succeed with the BAS program.

**Entry Requirements for Green River Aeronautical Science BAS Degree**

Entry Requirements	Notes	Credits
Student completed AAS or BAS degree that closely matches existing GRC AAS degrees course content Applicant can use PLA to satisfy entry requirements according to GRC PLA Policy	Student earned the AAS or BAS degree at a regionally accredited institution	Varies, depending on AAS Degree, but must be at least a minimum of 90 quarter credits or 60 semester credits
Cumulative GPA of 2.5 from all college courses	Students can remediate grade deficiencies by retaking class to improve grade or passing a Challenge Exam to prove topic or discipline knowledge	
Minimum grade of 2.5 in all Aviation courses		

**Efforts to Assure Service to Our Diverse Population**

A very important Green River institutional goal is to provide usable, meaningful education to our diverse community populations. The Green River Diversity Support Statement provides guidance in this regard:

“Members of our diverse communities will have reasonable access to affordable educational programs and services that meet student needs”

To attain the College Diversity goal the Aeronautical Science BAS Program team will work with the Green River Diversity and Equity Council, the Outreach Office and the Marketing and Communications staff to ensure we develop an effective education outreach plan and a BAS marketing plan that clearly identifies opportunities the AAS and BAS degrees offer to the diverse populations across Washington.

We will emphasize that anyone can come to Green River for an education in Aviation and can expect that we will do all in our power to help that student succeed. We will emphasize the various career paths these degrees offer with emphasis on understanding that merit trumps all other factors. We will continue to extend our current model of “open to all, all are welcome” to every student with emphasis on positive program guidance during the college education experience at Green River so students can learn necessary skills and knowledge to be successful. Marketing will emphasize the connection between educational skill and knowledge development as part of learning the normal functioning of the industry workforce so our students can understand that attaining certifications and qualifications is necessary to successfully transition to the Aviation industry workforce. We will measure our progress by assessing proportional representation, student transition to the work force, comparing student diversity against community diversity and daily interpersonal communications feedback, student feedback surveys, and post graduate follow-ups. We will measurements of our delivery modes and course schedules to assure we account for the needs of all our students in the Aeronautical Science BAS Program. We will monitor our working students (many of our current students work and attend school) to see how work and school complement each other. We will pursue an extensive outreach programs to connect with local high school communities and with the local US military populations in our area. We will expand the existing AAS degree marketing programs the Aviation Department uses and include marketing the BAS degree to these same target markets.

To make connections into the Aviation Operations sector that will lead the graduates to those high quality jobs in the Aviation industry, the BAS Program team and the Aviation Faculty will work with the Green River Aviation Advisory Board and the Green River Administration team to promote the Aeronautical Science BAS Program to local and regional businesses and agencies. Steadily strengthening these links will improve the paths from graduation to job entry for our students. Similarly, we will leverage our connections that our adjunct faculty bring to Green River and we will continue with focused participation in industry events such as local and state-wide Aviation industry conferences to further develop these school-to-job connections for our Aviation Operations students.

#### Criterion 4: Student Services Plan

Green River provides a strong package of student support services to help all students complete studies here at Green River. Throughout the AAS-BAS educational process, the BAS program team will work to ensure Green River Aviation Department maintains and sustains a high level of educational quality and student services support. We want our Aeronautical Science BAS students to receive the same high-quality student services that all Green River students receive. We will add those elements that support transitions from AAS to BAS and then on to jobs in the Aviation Industry.

Here are the Green River support services:

- **Bookstore:** The Paper Tree bookstore offers students one-stop convenience for textbook and general school supplies needs. Students may purchase textbooks online as well as on campus.
- **Educational and Career Advising:** Because many of our students receive state and federal financial aid via several different funding programs with very specific state and federal requirements regarding aviation education and financial support and advising students requires extensive knowledge of many very specific programmatic details, the Program Director for the BAS for Aeronautical Science will provide most of the

educational and career advising and planning for BAS Aeronautical Science students. The BAS Program Manager and the Green River Career and Advising Center staff will provide additional career and education planning resources for those components of the Aviation Department education pertaining to students transitioning from high school to college, former Green River students and graduates returning to Green River, our many Veteran students attending Green River as well as those older students coming to back to college for the first time. For example, helping Veterans satisfy both Veterans' Administration (VA) rules and Federal Aviation Administration (FAA) rules is of critical importance for Veterans. Keeping all students on positive trajectories to completion while meeting all these requirements requires very careful planning and execution. There are many potential pitfalls that students must avoid. In particular are students who receive Washington State and US federal financial aid. These students must use adroit planning and careful execution in order to complete AAS and BAS degrees effectively and efficiently. In the event that the BAS program manager (TBD) or BAS faculty chair (Jerry Wolfe) is not available to advise students and guidance is necessary for the student to proceed, the Aviation Department will train an alternate advisor designee in the Career and Advising Center. The Dean of Technology and the Dean of Student Retention and Success will meet and designate this person in the summer of 2015 and the Aviation Department will conduct the training subsequent to appointment as the Designee.

- **Child Care Center:** The Child Care Center provides safe, nurturing, convenient environment for the children of students who would be unlikely to be able to attend school without reliable child care. The Child Care Center uses a sliding fee scale that accounts for the age of the child, student gross monthly or annual income and family size. Students in programs such as JOBS, Employment Child Care, and Transitional Child Care can participate in using the Child Care Center. This benefit is very good for our students as many of our students are also parents.
- **Counseling and Health Services (CHS):** CHS promotes physical and psychological health within the Green River campus community and is very focused on supporting students during a time when many students feel great pressure to perform well. Adding education to lives that are already full of stress due to making a living, adapting to changing environments due to age of the student and student family members can be difficult. CHS is ready with specific no-cost mental health counseling and no-cost self-care/wellness education to help our students through these tough times. CHS operates Workshops and Consultation Services for the Green River staff and faculty also at no cost, and of course, all Counseling and Health Services are confidential.
- **Disability Support Services (DSS):** DSS assists students with physical, learning, sensory, cognitive and/or psychological disabilities by identifying and coordinating reasonable accommodations for equal access to academic programs and activities. Green River maintains a strong program to reach out and assist disabled students realizing the power that education can provide to transform lives for all students in a positive direction.
- **Diversity and Multicultural Affairs:** The Office of Diversity and Multicultural Affairs (ODMA) promotes intellectual discourse, leadership and social justice among students, staff, faculty and the surrounding communities. For example, due to the high concentration of students who speak Spanish as a first language, to assist those students with transitioning to college level work, ODMA provides Spanish services to students to assist in translating rules and procedures that experience has shown are areas that challenge some students. ODMA also provide a peer navigation program that matches older students with newer students to help the new students adjust to the Campus environment. Other programs include peer mentoring, additional academic and personal advising and periodic diversity support workshops to help students adapt to the Green River college environment. ODMA staff members lead the Campus in efforts to make everyone who attends Green River feel welcomed, comfortable and amongst friends here at Green River.
- **Enrollment Services:** Enrollment Services provides a spectrum of support services to prospective students and, current students.. Enrollment Services is responsible for ensuring Green River Students satisfy state

education requirements in a positive way that reflects Washington State intentions to produce competent, competitive students who can find and hold jobs in the Washington workforce. The BAS Program Team will work closely with Enrollment Services to ensure that all BAS Aeronautical Science students comply with all admissions, registration, records and graduation requirements that SBCTC and Green River set forth.

- **Financial Aid:** The Financial Aid office prepares and disburses federal, state, and institutional aid for all Green River College students using the debit card system HigherOne which provides Gator Choice debit cards to students. HigherOne allows students to decide how to receive financial aid disbursements and provides direct access and control of financial aid the student receives. Paying for college is a challenge many students face. To mitigate this challenge Green River makes financial aid available in number of ways:
  - Gift & Grant scholarships - Green River Foundation provides hundreds of scholarships annually
  - Employment – each year, Green River employs hundreds of students in a variety of campus jobs
  - Low interest loans with deferred repayment plans
  - Green River Tuition Payment Plan - STEP – STEP is an option for those students who have filed financial aid requests and are waiting for the Green River financial aid team to process requests and allocate the funds. STEP allows tuition payment over a time span that puts more financial control in student hands.
  - Veterans Programs - Green River has a very strong program to help Veterans access the G.I. Bill Veteran's Assistance Program education benefits. Because we have a large local military population, providing this assistance is a very important part of our financial assistance programs.
  - Scholarships - Additionally, after the State Board has approved the Aeronautical Science BAS degree, the Aviation faculty, the Technology Division leaders will work with the Green River Foundation to reach out to local companies to create BAS program-specific scholarships.
- **Employment Support** – Aeronautical Science BAS Program Team will work to find jobs and smooth the transition from school to work to the maximum extent possible using the resources of the Aviation Department and the BAS program. The BAS Program Team will use existing contacts and bridge to existing databases of potential employers so students can build awareness of job opportunities and potential employers. Additionally, the BAS Program team will actively participate in Aviation Industry events and organizations such as the Pacific Northwest Aviation Trade Fair, the Pacific Northwest Aviation Alliance (PNAA) and the Aerospace Futures Alliance (AFA), the Pacific Northwest Defense Coalition (PDNC) and the Washington State Department of Transportation Aviation Division (WSDOT/AV) Transition Program to build and expand connections with the local and regional aviation community of businesses and employers. Green River Aviation faculty will participate in trade organizations such as the Regional Airline Association (RAA), Washington Airport Managers Association (WAMA), the Aircraft Owners and Pilots Association (AOPA), the Washington Pilots Association (WPA) and other regional, state and local agencies which bring together employers and educators to solidify and expand connections to help Green River BAS students find jobs after graduation by creating an effective linking with employer contacts through personal connections, conferences and meetings to stay abreast of state-wide and federal school-to-work programs that connect Aviation education programs and student with potential employers.
- **Library and Open Computer Labs:** The Green River Holman Library serves the students, faculty, and staff of Green River College with resources and services necessary to access information and the development of information literacy skills. The library houses approximately 59,000 physical items, more than 25,000 eBooks, online access to approximately 15,000 periodicals through subscription databases, subscriptions to 200 printed periodicals and access to more than 150 networked computers in the Information Commons open computer lab of the Holman Library. Students also have access to more than 100 networked computer workstations in an open computer lab in Green River Technology Center. With the advent of the new Aviation Building at Auburn Airport in 2017, the Aviation Department will have a computer lab with 30 plus computer workstations



- **Online Services:** Online services enable students to apply for admissions, plan schedules, register and pay for classes, run a Degree Audit to view graduation program requirements and register for courses complete the Aeronautical Science BAS program and view unofficial transcripts. Students have access to school provided e-mail accounts, eLearning content resources and online library services.
- **Tutoring and Resource Center:** Students have access to free tutoring services. In addition to tutoring at Holman Library, student resource centers at Knowledge Centers on Campus where students can go to get assistance with Writing, Public Speaking and Math skill development. These Learning Centers provided focused help with tremendous expertise that Green River has found to be extremely effective for many student who struggle with writing, public speaking and the bugaboo of many students – math! The Dean of Technology and the Director of the Tutoring and Resource Center will meet to determine the financial requirements to provide tutoring services with the understanding that tutoring expense will not to exceed \$3,700 per quarter.
- **Veterans Services:** The Veterans Service office assists veterans in activating and maintaining their educational benefits. Green River actively reaches out to veterans through the Veterans Coordinating Council, which engages in marketing and outreach to veterans about resources available on campus, honors veterans with symbolic events, and seeks to help veterans with the transition from college to career or workforce.
- **Women’s Programs:** Women’s Programs provides a wide variety of services and resources. It offers assistance or referrals in many areas, including: starting college or returning to school after time away; child care; financial aid; scholarships; sexual harassment and discrimination; dating and domestic violence; rape and sexual assault; legal issues; public assistance; and academic matters.

#### Criteria 5: Commitment to Build and Sustain a High-Quality Program

Green River plans to build and sustain a high quality BAS program by:

1. Ensuring financial stability with a sound Financial Plan, the summary of the Financial Plan is below and the full Financial Plan is at Appendix D
2. Provide a strong BAS Administrative team to manage the BAS in Aeronautical Science
3. Ensuring that the AAS degrees and the BAS major tracks are complimentary and have sufficient level of academic rigor and topical coverage to keep educational integrity from year one to year four

#### 5.1 Aeronautical Science BAS Financial Plan

The financial forecast for the Green River BAS in Aeronautical Science is that the BAS will be net positive in year one and will steadily improve for the five year projection. The Green River financial plan for the Aeronautical Science BAS Program forecasts that extended financial support from Green River will not be necessary. Our research indicates exceptionally strong demand - 75% of enrolled students would opt to remain at Green River to complete the BAS at in Aeronautical Science rather than transfer elsewhere. The financial summary below using conservative five year enrollments projections and associated expenses shows that Green River Aeronautical Science BAS is economically viable in year two and will remain so continuously through year five.

**From Appendix D -Green River College, Aviation BAS in Aeronautical Science - Financial Summary**

<b>Estimated Net Program Excess ( or Deficiency)</b>	Year 1 2015-16	Year 2 2016-17	Year 3 2017-18	Year 4 2018-19	Year 5 2019-20
Estimated program income (From Self-Support Tuition & Fees sheet)	177,283	310,043	343,817	388,505	400,161
Estimated total program expenses (from Expenses sheet)	180,644	278,627	339,127	348,299	357,740
Deficit in Year One only	--3,361				
Estimated net program excess		31,416	4,690	40,206	42,421

**From Appendix D - Green River BAS in Aeronautical Science - Projected Enrollments**

<b>Projected Enrollments</b>	Year 1 2015-16	Year 2 2016-17	Year 3 2017-18	Year 4 2018-19	Year 5 2019-20
Headcount (FWS)	25	42	45	50	50
Headcount (Summer)	0	8	10	10	10
Total Headcount	25	50	55	60	60

**NOTES - Enrollments**

Headcount Backup

Full-Time	20	35	35	40	40
Part-Time (10 Credits)	5	7	10	10	10
Total headcount	25	42	45	50	50

**Green River College, Aviation BAS in Aeronautical Science Table of Expenses**

**Estimated Program Expenses**

	Year 1 2014-15	Year 2 2015-16	Year 3 2016-17	Year 4 2017-18	Year 5 2018-19
Full-time Faculty Salaries					
Part-time Faculty Salaries	34,848	71,787	73,941	76,159	78,444
BAS Program Director Salary	31,559	43,558	44,865	46,211	47,597
BAS Program Mgt Support	8,965	18,468	38,044	39,185	40,361
Instructional Lab Tech Salary	10,594	21,982	45,283	46,641	48,040
Simulator Instructor	15,296	15,755	16,228	16,715	17,216
Tutoring Resources	3,700	3,700	3,700	3,700	3,700
Benefits	36,244	64,776	82,297	84,746	87,262
Curriculum Development Stipends	8,000	8,000	4,000	4,000	4,000
Equipment and Tools	-	-	-	-	-
Software, computer, equipment and tool maintenance and upgrades	-	-	-	-	-
Goods and Services	3,000	2,000	2,000	2,000	2,000
Library	5,000	5,000	5,000	5,000	5,000

Travel	-	-	-	-	-
Professional Development/Conferences/Travel	8,000	8,000	8,000	8,000	8,000
Program Promotion	10,000	10,000	10,000	10,000	10,000
Tutoring	5,438	5,601	5,769	5,542	6,120
Total Estimated Program Expenses	180,644	278,627	339,127	348,299	357,740

NOTE - Simulator Instructors for 2-year program = \$74,420

## Appendix D -Green River College, Aviation BAS in Aeronautical Science

### Estimated Program Income

#### APPLIED BACCALAUREATE OPERATING FEES

	Year 1 2015-16	Year 2 2016-17	Year 3 2017-18	Year 4 2018-19	Year 5 2019-20
Summer	-	17,280.16	22,248.20	22,915.60	23,603.10
FWS	157,283.25	272,162.52	300,350.70	343,734.00	354,046.50
Co-op Fee	20,000.00	20,600.00	21,218.00	21,855.00	22,511.00
TOTAL	177,283	310,043	343,817	388,505	400,161

Notes:

Tuition and fees from WSCTC: FY2012-13 Tuition Schedule for Upper Division Courses in Applied Baccalaureate Degree Programs

<http://www.sbctc.edu/college/finance/2012-13UpperDivisionTuitionandFees.pdf> and

<http://www.sbctc.edu/college/finance/2012-13LowerDivisionTuitionandFees.pdf>

Tuition & fees = FTEs x Applied Baccalaureate Operating Fees of \$2503.90 per quarter for 3 quarters

\*1.03 each year to account for 3% increase in tuition each year.

#### **Exhibit 11: Projected Enrollments**

	Year 1 2015-16	Year 2 2016-17	Year 3 2017-18	Year 4 2018-19	Year 5 2019-20
Headcount	25	50	55	60	60
FTEs	25	50	55	60	60
Operating Fee	2,097.11	2,160.02	2,224.82	2,291.56	2,230.31

### **5.2 Aeronautical Science BAS Administration Team**

An Aviation Department faculty member with extensive aviation, education and leadership experience will oversee and administer the Aeronautical Science BAS program as the BAS Program Director with support from a BAS Program Manager and a BAS Program Technical Support Specialist. The major focus of the Aeronautical Science BAS Program Team is to ensure the program will provide essential skills and knowledge that will make Green River Aviation graduates competitive for aviation jobs by maintaining BAS level academic rigor, by transitioning students from AAS degrees into the BAS in Aeronautical Science degree in an organized and efficient manner, and by assisting BAS Aeronautical Science students with the transition into industry jobs as much as reasonably possible. To accomplish these goals, the BAS Administrative team will:

- Develop and implement a program of study that addresses the rapidly changing Aviation Next Generation (Next Gen) environment currently on-going in the Aviation Industry



- Continually assess the Aeronautical Science BAS content to ensure very high quality Aviation Education program offerings
- Develop effective articulation agreements with other two-year and four-year institutions to facilitate student transfers into Green River and to other Advanced Aviation Degree programs as student needs and goals dictate
- Ensure Green River BAS graduates can successfully transition to Masters’ level advanced graduate degree programs at the University level
- Establish and maintain an effective Marketing Program for the Aeronautical Science BAS in concert with the Green River MARCOM team to attract and recruit new Aviation Students from all areas into the professional Aviation workforce
- Build on existing Aviation employer relationships and extend those outreach efforts to new potential employer partners to smooth the path from College to the Workforce
- Provide accurate advising so all students, including Veterans and transfer students, can accomplish degree requirements with the minimum of hassle and the maximum of learning opportunity appropriate for each individual student
- Manage essential student services support necessary for students to allow students focus on learning
- Provide information about the BAS program to prospective students
- Advise, guide, assist, enroll and register new BAS program students
- Guide BAS program students to available student services necessary to support and aid student success
- Link BAS program students with local employers for internship and job opportunities

**Program Administration Team FTEs**

The table below summarizes the anticipated program effort of the Faculty Program Director, the Program Manager, and the Program Instructional Support Technician.

Name	Title	Overall Program Effort %		
		Year 1	Year 2	Years 3-5
Jerry Wolfe	Program Director	50%	67%	67%
Yvonne Huang	Program Manager	25%	50%	100%
Doug Douglas	Instructional Support Technician	25%	50%	100%
<b>Total Staff FTEs:</b>		<b>1.0</b>	<b>1.67</b>	<b>2.67</b>

The three people comprising the BAS Administrative Team have a very broad, strong background in managing technical education programs:

Jerry Wolfe – Program Director and Tenured Faculty - Jerry has over 24 years working as an Air Traffic Control Specialist Certified Professional Controller at Seattle Air Route Traffic Control Center (ARTCC), as On-the-Job (OJT) Instructor, Seattle ARTCC, as Airspace and Procedures liaison for Seattle ARTCC, and as Training Instructor for Seattle ARTCC; Non-Aviation Credentials and Experience 6 years as a secondary education teacher, Master of Ministry, Pepperdine University, Malibu, CA (1996), Master of Music, Webster University, St. Louis, MO (1982), Bachelor of Arts in Education, Harding University, Searcy, AR (1978) currently the Lead ATC instructor for Green River Aviation Department – currently in the Tenure process and doing exceptionally well.

Yvonne Huang – Program Manager - 25 plus years of program management experience in public education and in private business and most recently as Program Coordinator for Aviation Technology where she was

responsible for contract oversight of two Green River Aviation flight training contractors -Galvin Flying Services and Classic Helicopter Responsible for maintain accurate records and monitoring progress and completion of flight classes; for Aviation department marketing, working in collaborate with Green River MarCom staff to create for Aviation Department marketing materials and to represent Green River Aviation at outreach events at local military bases, at local highs schools, at job fairs and at aviation industry events in the Puget Sound region; supporting Veterans and working closely with the Green River Veterans Service office to ensure timely information transfer and certification of VA authorized classes; for international programs support working with foreign students and visiting dignitaries for other countries who come to Green River to learn more about Green River aviation education programs and to provide support for administrative processes regarding foreign students; more than 15 years working in private business as a business manager and as an accountant and financial manager.

Richard (Doug) Douglas – Technical Support Specialist - more than 26 years of experience in technical support functions in the US Air Force and at Green River College, currently as the Aviation Simulator Systems Support Manager, Green River College (GRC), Auburn, WA .Doug manages three Redbird full-motion simulators, two static simulators, and is direct support for the ATC radar simulator; manages and often installs and trouble-shoots software and hardware, performs maintenance and upgrades and supervises 18 flight simulator instructors; collaborates with instructors to prepare instructional scenarios for ATC lab and Flight Simulator lessons, assists with lecture demos and prepares labs for official visits and demonstrations.

Green River is fully committed to developing and sustaining an Aeronautical Science BAS that will keep abreast of Aviation Industry trends and employer needs in order to produce job ready graduates who can successfully compete for and hold jobs in the modern Aviation Industry. Below are tables that show the linkage between BAS major degree tracks – Flight Operations and Aviation Operations Management - with the seven existing AAS degrees credits.

**FLIGHT OPERATIONS MAJORS**

**BAS Flight Operations Major with Commercial Pilot AAS base**

Degree	Aviation Credits	Flight Credits	Non-Aviation Credits	Elective Credits	Total Credits
Flight Operations BAS	29	14	40	5	88
Commercial Pilot AAS	60	15	20	10	105
<b>Total</b>	<b>89</b>	<b>29</b>	<b>60</b>	<b>15</b>	<b>193</b>

**BAS Flight Operations Major with Helicopter Pilot AAS base**

Degree	Aviation Credits	Flight Credits	Non-Aviation Credits	Elective Credits	Total Credits
Flight Operations BAS	29	0	40	5	74
Helicopter Pilot AAS	60	21	20	10	111
<b>Total</b>	<b>89</b>	<b>21</b>	<b>60</b>	<b>15</b>	<b>185</b>

**AVIAITION OPERATIONS MANAGEMENT MAJORS**

**BAS Aviation Operations Management Major with Aircraft Dispatch AAS base**

Degree	Aviation Credits	Non-Aviation Credits	Elective Credits	Total Credits
Aviation Operations Management BAS	43	40	5	88
Aircraft Dispatch AAS	65	20	10	95
<b>Total</b>	<b>95</b>	<b>60</b>	<b>15</b>	<b>183</b>

**BAS Aviation Operations Management Major with Air Traffic Control AAS base**

Degree	Aviation Credits	Non-Aviation Credits	Elective Credits	Total Credits
Aviation Operations Management BAS	43	40	5	88
Air Traffic Control AAS	83	20	10	113
<b>Total</b>	<b>126</b>	<b>60</b>	<b>15</b>	<b>201</b>

**BAS Aviation Operations Management Major with Air Transportation AAS base**

Degree	Aviation Credits	Non-Aviation Credits	Elective Credits	Total Credits
Aviation Operations Management BAS	43	40	5	88
Air Transportation AAS	65	30	10	105
<b>Total</b>	<b>113</b>	<b>70</b>	<b>15</b>	<b>193</b>

**BAS Aviation Operations Management Major with Airport Management AAS base**

Degree	Aviation Credits	Non-Aviation Credits	Elective Credits	Total Credits
Aviation Operations Management BAS	43	40	5	88
Airport Management AAS	68	35	10	113
<b>Total</b>	<b>121</b>	<b>70</b>	<b>15</b>	<b>201</b>

**BAS Aviation Operations Management Major with Unmanned Aerial Systems AAS base**

Degree	Aviation Credits	Flight Credits	Non-Aviation Credits	Elective Credits	Total Credits
Aviation Operations Management BAS	43	0	40	7	90
Unmanned Aerial Systems AAS	50	0	25	15	90
<b>Total</b>	<b>103</b>	<b>10</b>	<b>60</b>	<b>12</b>	<b>180</b>

**Criterion 6 - Program Accreditation and Articulation**

**Curricula Development modeling from other Accredited Colleges and Universities**

Green River College has demonstrated success securing NWCCU approval for three BAS degrees to date. We intend to use the NWCCU “fast-track” option for accreditation and expect approval for Green River Aeronautical Science BAS degree within 90 days of submitting our substantive change document.

Green River College reviewed the BAS level classes of the leading accredited Aviation colleges in the US and coordinated with faculty from several of those other schools to determine the curricula for the Green River Aeronautical Science BAS. Here are those schools

- Embry-Riddle Aeronautical University
- University of Alaska-Anchorage
- Central Washington University
- University of North Dakota
- Southern Illinois University

- San Jose State University
- Arizona State University
- Kansas State University
- Ohio State University
- Oklahoma University
- Purdue University

To maintain Washington State standards for accreditation, Green River Aviation faculty studied other local programs in order to assure our BAS program maintained high academic standards, and also to find ways to collaborate with those other state colleges in Washington. However, there are very few colleges with which to compare our BAS program and even our AAS programs. For Flight Operations, there is just one other college on the west side of the Cascades – Clover Park, and on the east side of the Cascades there are only two – Central Washington, and Big Bend - that have Flight Programs. Similarly, in the Aviation Operations Management area, no other Washington state college has an Aircraft Dispatch program or an Air Traffic Control program or an Airport Management program. No other college on the west side of Cascades has an Air Transportation AAS program and on the east side of the Cascades only one college, Central Washington, has a similar program – Aviation Management. The dearth of Aviation Operations programs is the primary reason for Green River to offer the BAS program we are proposing – to fill a void that is needs filling.

In preparing the Green River Aeronautical Science BAS proposal, we looked at all other 4 year colleges in Washington State to assess existing capabilities and found that except for Central Washington State, there were no other 4 year schools in Washington and even beyond Washington State, that offered the broad range of Operations related degrees akin to our Aeronautical Science BAS. A review of other Aviation programs in the Pacific Northwest showed that there are only a few other schools that have Aviation Programs and all of those programs focus on Flight. Only one other school – Central Washington University has anything other than a Flight Option. Conversations with CWU representatives with whom we met at various Aviation gatherings such as the Pacific Northwest Aviation Trade Fair, the Pacific Northwest Aviation Alliance (PNAA) annual conferences, the EAA Northwest Aviation Fly-in and job fairs that CWU and GRC both attended confirmed that having a 4 year Aeronautical Science BAS at Green River would be a good idea. The general attitude of the CWU representatives was that the looming pilot shortage and the continued forecast of steady and very healthy growth year-over-year in the Aviation industry highlighted that Washington State needs to produce more trained people for the Aviation industry to keep up with expanding demand. Another point in favor of having a Green River Aviation BAS is the broad range of AAS Aviation Operations degrees Green River offers.

No other school including CWU has the number of robust Aviation Operations Associate Degree programs that Green River offers. For example, Green River has the only Air Traffic Control program, Dispatch Program and Airport Management Program in the Pacific Northwest. The few Flight School programs on the west side are all 2-year programs, Central Washington University has the only 4 year program and Department Chair Ann Hoover specifically indicated no opposition to the GRC Aeronautical Science BAS proposal because CWU is full and has been turning away students from the CWU Aviation BAS program. Most west side Aviation students opt to go to Embry-Riddle Aeronautical University (ERAU) Seattle Campus even though ERAU is twice as expensive as CWU because those students don't want to go east of the Cascades for school. We've looked at ways to partner with other schools but there just are none. Also, other than Green River College, there has been no distinct effort elsewhere in the 2 or 4 year schools in Washington State to create or expand aviation programs because doing so is very challenging. Creating an expanded Aviation program requires funding investments and someone with the industry connections to ensure students can successfully transfer from school to industry. These are the attributes and expertise Green River because Green River has been educating and placing Aviators in jobs for a half-century.

We are expanding into a known need to try to stay abreast of Aviation industry changes - changes that come as a surprise to many but are not a surprise to us. We foresaw the shifts in the Aviation industry four years ago and began discussions with our Aviation Advisory Board in 2011-2012 year about the expansion of the Aviation market, the impending Pilot Shortage which has now become a hot topic for people within and outside of the aviation industry and the need to create more educational opportunities for Washington State students. However, one thing is very clear, even as we see these people shortages develop is the benefit of the 4-year degree.

Clearly, industry employers prefer 4-year program graduates over 2-year program graduates. So, to our way of thinking, our educational duty was clear – expand the Washington State aviation 4-year degree opportunities in the Aviation Operations areas. Doing so strengthens the futures of our aviation program graduates and helps maintain Washington’s lead in the Aviation Industry. Maintaining that lead is critical to maintaining the Washington State economy and preserving our state as a great place to go to school, work and live. Thus, when we proposed the 4 year BAS in Aeronautical Science, we were not surprised that none of the 4 year schools objected to our BAS proposal. The CWU response “jump in, the water’s fine” was what we expected. The bottom line is this - there is much to do, time is getting steadily shorter and we must act now to prevent “people” shortages that could impair our largest commercial employer - the Boeing Company – from being able to sell airplanes.

And, in regards to educational partnerships for Green River students and graduates, Green River has been and will continue to be an effective partner with other educational institutions in the area that offer aviation education including CWU. We have in the past - and will continue in the future – to encourage students to consider attending CWU if doing so is in the best interests of the student. Similarly, we will continue our partnerships with the other aviation programs as before. Adding the BAS will not lessen our efforts to cooperate and collaborate with the other colleges. Clover Park CC, South Seattle CC, and the other schools in the Puget Sound region and across the state will see no difference in our efforts to work as hard as possible to help every student find a successful career path that will help that student succeed in life. Likewise, as soon as we have approval, we will immediately begin work to create effective articulation agreements and transition processes and expand working relationships with universities that offer Masters’ degree programs to help our BAS students move to those programs. We see a clear need to help students as much as we are able to achieve advanced degrees. Our goal is and has always been to do what is best for the student – adding the GRC 4 year degree in Aeronautical Science will be a very positive step in achieving that goal.

#### **Criterion 7 - Pathways beyond the BAS Degree**

Green River has traditionally transferred students to Bachelor and Master degree programs at the leading accredited Aviation colleges in the US and foresees continuing to do so. By intent, the Green River BAS in Aeronautical Science modeled the GRC BAS program after these schools specifically to facilitate the transfer of GRC BAS these schools

- Embry-Riddle Aeronautical University
- University of Alaska-Anchorage
- Central Washington University
- University of North Dakota
- Southern Illinois University
- San Jose State University
- Arizona State University
- Kansas State University
- Ohio State University

- Oklahoma University
- Purdue University

As indicated above, as soon as we have secured NWCCU approval for our BAS Aeronautical Science degree approval, we will actively secure pathways for our students to post baccalaureate degree pathways and greater educational opportunities at Central Washington University and the other Universities in our region.

**Criterion 8 – External Expert Evaluation Summary – See reviewer comments at Appendix C**

We requested and received Peer Reviews from the University of Alaska-Anchorage and from Arizona State University – Appendix C has full comments about each Review and each Reviewer.

**University of Alaska-Anchorage – Reviewer Raymond Weber – see review comments at Appendix C**

The Green River BAS course work is very modern in terms of aviation related information noted by critical inclusion of a Safety Management System (SMS) course which is becoming standard for international operations and which the FAA has begun to mandate in most aviation sectors. Assessments for the BAS curriculum are solid with a number of clearly defined assessment tools and assessment time frames that follow program goals. Classes represent a solid aviation core of consistent with the learning environment and inclusion of industry specific training techniques such as LOFT which would be good for non-flight course work as well. One negative area is the narrower focus on aviation with not much diversity for non-aviation classes such as Math, Humanities and Social Sciences that is more normal for traditional four-year Colleges and Universities. Other colleges and universities have broader program coverage and more emphasis on general education as well as targeted aviation education. Last, Green River should use caution about restricting entry to prevent violating the “open door” enrollment opportunity.

**GRC RESPONSE REGARDING UAA COMMENTS - From the UAA review critique, we reviewed and revised the AAS and BAS Course Electives options to include more math, humanities and social science classes. We also revised the language regarding BAS program entry to make the entry process more flexible and more accommodating for students**

**Arizona State University – Reviewer Michael Pearson – See review comments at Appendix C**

Green River has appropriate and adequate technology and facilities to offer a BAS degree in Aviation. Green River also has appropriately qualified staff and faculty in place and with appropriate plans to hire additional staff as needed upon approval of the BAS program to fully support offering a BAS level degree. The Green River BAS course offerings are appropriate for the BAS degree in content and level with appropriate instructional capability and BAS program oversight to ensure high levels of quality and academic content commensurate with a BAS program. The evaluation process for the BAS is appropriate and sufficient to ensure high quality education will continue due to a continued focus on improving program currency and quality.

**RESPONSE REGARDING ASU COMMENTS – There were no changes necessary from this review**