Bachelor of Applied Science: Project Management

Program Proposal—Forms C & D

May 2013

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Form C

COVER SHEET
NEW DEGREE PROGRAM PROPOSAL

Program Information

Program Name: Project Management

Institution Name: Columbia Basin College

Degree: BAS Level: Bachelor Type: Project Management CIP Code: 52.0211
(e.g. B.S. Chemistry) *(e.g. Bachelor)* *(e.g. Science)*

Contact Information (Academic Department Representative)

Name: Deborah Meadows

Title: Dean for Business and IT

Address: 2600 North 20th Ave
Pasco, WA 99301

Phone: (509) 542-4863

Fax: (509) 546-0401

Email: dmeadows@columbiabasin.edu

Name: Curt Freed

Title: Vice President for Instruction

Address: 2600 North 20th Ave
Pasco, WA

Phone: (509) 542-4806

Fax: (509) 546-0404

Email: cfreed@columbiabasin.edu

Chief Academic Officer Date

Form D

NEW DEGREE PROGRAM PROPOSAL

Introduction

Columbia Basin College (CBC) proposes to deliver a Bachelor of Applied Science degree in Project Management (locally referred to as "BAS-P") and is prepared to enroll junior-level students beginning Fall 2013. The degree will build on CBC's one-year Project Management Certificate and two-year Associate of Applied Science Project Management degree programs. The certificate and two-year degree programs serve as the knowledge and skills foundation for students to complete junior and senior level coursework in project management. The Bachelor of Applied Science degree in Project Management will be offered as part of CBC's comprehensive Business Program.

This BAS degree in Project Management will help to meet current and future employment needs for CBC's service district of Benton and Franklin counties. Local research indicates a bachelor degree is needed for optimal employment in the district. The college's rigor and quality is assured by highly qualified faculty with over 30 years of project management experience in the private and public sectors as well as its success with an accredited BAS degree in Applied Management (see Appendix A). CBC obtained a federal grant and established public and community partnerships to support a local program largely due to the strong documented need for additional project management professionals in our region. In addition, CBC's success in establishing fruitful public and community partnerships serves to provide on-going faculty development, adjunct faculty that have extensive project management experience, and students with job shadow and internship opportunities.

The program proposal for a BAS degree in Project Management includes specific information addressing the eight criteria for new BAS degree program proposals and provides information and evidence regarding CBC's capacity to implement and maintain a BAS degree program.

Criteria 1. Curriculum Demonstrates Baccalaureate Level Rigor

CRITERIA	STANDARD
1. Curriculum demonstrates baccalaureate level rigor.	Describe curriculum including: (1) program learning outcomes; (2) program evaluation criteria and process; (3) course preparation needed by students transferring with a technical associate degree; (4) general education components; and (5) course work needed at junior and senior levels in the BAS.

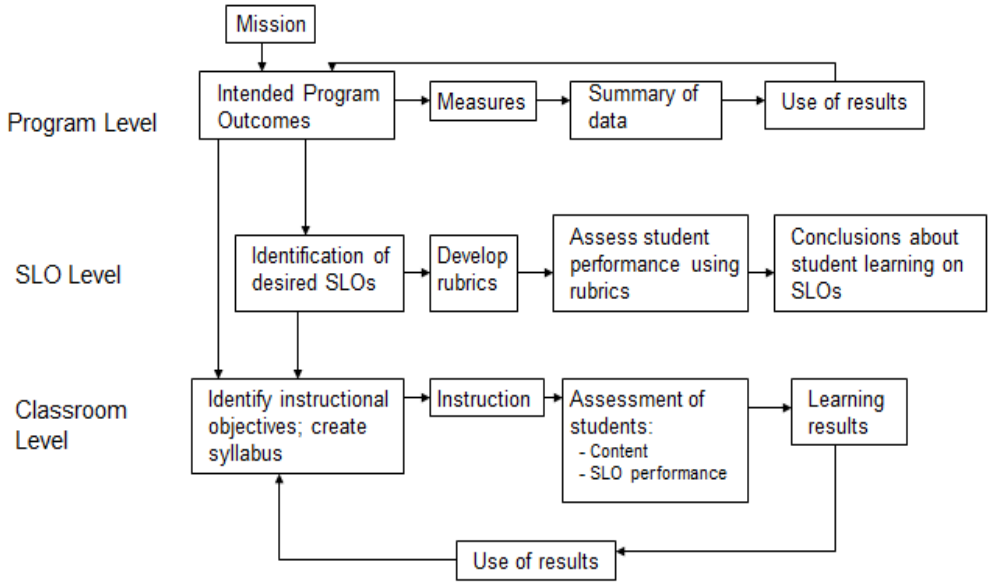
The project management curriculum emerged from an extensive review of current knowledge and skills needed by project management professionals, guidance from professional organizations and conferences, and the review of other project management degree programs. The resulting collection of project management courses addresses the skills and knowledge required of successful program management professionals. The degree is designed with continuity between the 100 and 200 level AAS degree in Project Management and naturally leads to the 300 and 400 level courses to complete the BAS-P core requirements. The general education courses are designed to build general knowledge and help build a mindset needed to respond to the changing world of project management. An overview of the entire four-year degree is located in Table 1. The curriculum was reviewed and approved by the Project Management Advisory Committee, the CBC Curriculum Committee, and by two subject matter experts**.**

1.1 Program Learning Outcomes and Assessment Process-

The review of and assessment for the BAS degree in Project Management, which includes junior and senior level project management core courses and general education courses will use the same assessment process as other Columbia Basin College degrees. The CBC assessment process was developed by the Teaching and Learning Committee, approved by the CBC Faculty Senate, integrated into the Curriculum Committee's course and degree approval process, and is supported by the Office of Institutional Research.

As illustrated in Figure 1, students who graduate from the Project Management BAS Program will meet the three levels of the CBC Assessment Model learning outcomes **Classroom/Course**, **college-wide Student Learning Outcomes (SLOs)**, and the **Program/Degree** level which incorporates the Project Management Program's general outcomes and Project Management Program outcomes.

Figure 1: Overview of the CBC Assessment Model



Classroom/Course Level. At the course level, each project management and general education course was reviewed and approved by the CBC Curriculum Committee. Student evaluations will be conducted on a regular basis. Each course is mapped to the college-wide student learning outcomes and tracked through the use of a specialized database, a commercial product called TracDat, for ongoing course reviews.

Student Learning Outcomes Level. The CBC college-wide **Student Learning Outcomes** (SLOs) includes the following:

Think Critically
Understand, analyze, and evaluate the elements of one's environment and one's habits of thought
Conceptualize alternatives to both

Reason Quantitatively and Symbolically
Develop a sense of number and pattern

Analyze, evaluate, and synthesize symbolic statements and quantitative arguments

Communicate Effectively

Use spoken and written language to express opinions, discuss concepts, and persuade an audience

Synthesize ideas and supporting information to create effective messages

Apply Information Tools and Resources

Accurately assess information needs

Select appropriate information tools and resources and use them efficiently

Evaluate, manage, and use information effectively and responsibly

Develop Cultural Awareness

Respect self and others

Explore and appreciate different cultures in an increasingly diverse, global community

Challenge culture-bound assumptions

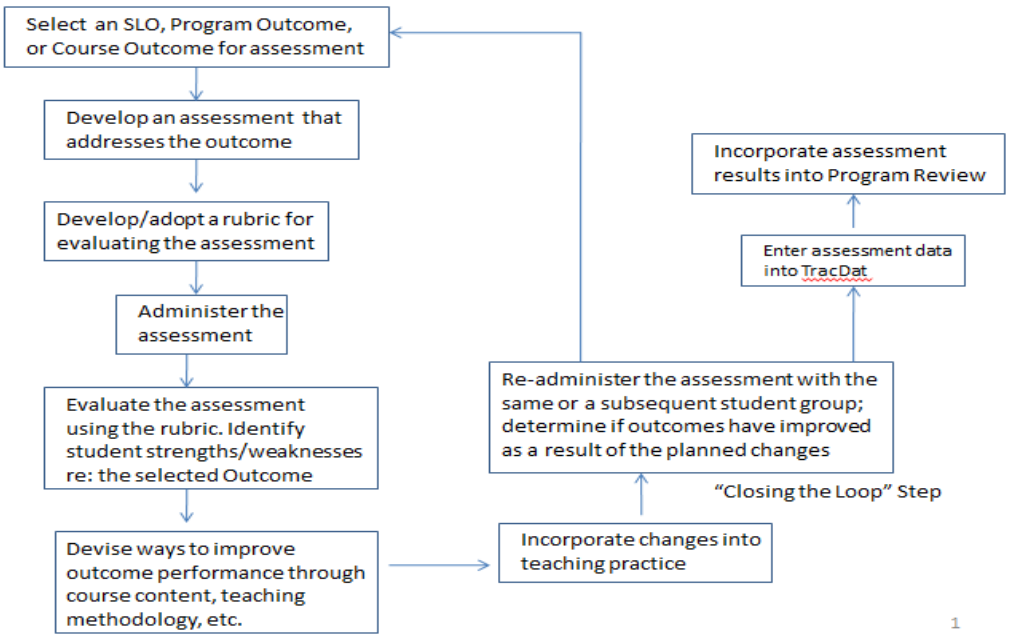
Master Program Learning Outcomes

Become familiar with a body of knowledge

Demonstrate ability to know or do the stated Program learning outcomes, which are developed by each department and Program and assessed annually

As with other CBC degrees, each of the six CBC SLOs are mapped to their location in the project management curriculum. Once the SLOs are mapped, Figure 2 illustrates how the SLOs are then tracked and assessed.

Figure 2: Tracking SLOs



1.2 Program Evaluation Criteria and Process

Program Level. In addition to the college-wide SLOs, all BAS degree program goals include the following skills:

1. Problem Solving
2. Communication
3. Information Tools
4. Quantitative Skills
5. Team effort

Program Learning Outcomes. Project Management students who graduate with a BAS degree in Project Management will also be able to:

1. Develop familiarity with project management processes, terminology, and concepts.
2. Develop familiarity with important project planning processes, terminology, and concepts.
3. Develop familiarity with project execution phase and monitoring/control processes, terminology, concepts, and activities.
4. Develop skills using Microsoft® Project 2010 or Primavera software for creating and using the program schedule.
5. Examine procurement concepts and practices including solicitation, source selection, and contract administration.
6. Develop project integration and communication concepts including directing and performing the work defined in the Project Management Plan, activity interrelationships, communicating relevant information to the team and stakeholders, and change control.
7. Develop and apply risk management concepts including risk identification, qualitative and quantitative risk analyses, risk response planning, and risk monitoring/control.

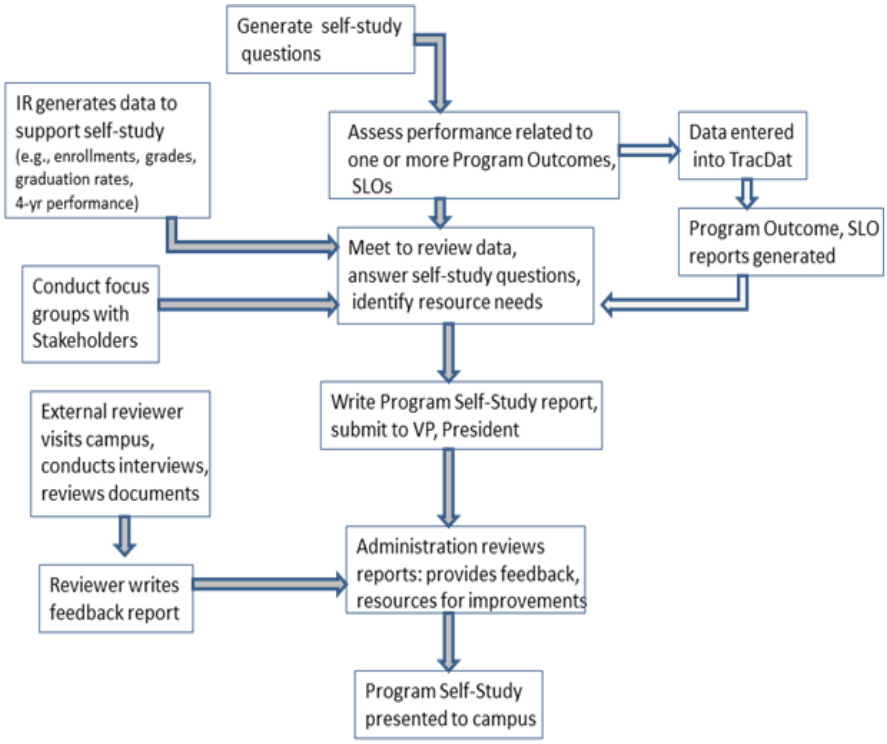
8. Integrate project management concepts in a simulated project(s) environment which includes applying project management concepts and practices, creating and using a project schedule, analyzing and communicating project performance, and experiencing and analyzing team behavior.

Every five years, the program staff will complete a thorough review of program outcomes at the program level. As identified in Figure 3, sample assessment efforts for program review may include but are not limited to:

- Track student and employer interest in the degree
- Develop pre/post surveys and testing items to determine value added learning from the degree
- Use ePortfolio to track Student Learning Outcomes through the individual classes
- Use ePortfolio to identify changes in learning from the initial BAS courses to the capstone course
- Conduct employer surveys to track BAS graduates capabilities, job fit, wage and job advancement information, and impact on company/organization
- Create a longitudinal BAS study using BAS alumni surveys, interviews, focus groups, etc.

This program outcome process for the two-year applied science degrees, the DTA/AA degree, and the current BAS degree in Applied Management are already in place and the BAS degree in Project Management will utilize the same process. Figure 3 illustrates the program review process.

Figure 3: CBC Program Review Process



Preparation for 300 and 400 Level Courses

The proposed BAS degree in Project Management will build on a newly expanded Project Management Program at CBC. CBC's first course in Project Management, BUS 130 Project Management, was developed in 2007. In 2008, AMGT 410 Project Management was developed to offer a project management upper division elective course for the BAS degree in Applied Management Program. These courses have produced significant interest in project management from the students and community giving CBC initial indication of the importance of project management needs in the community for years to come.

A strong Project Management Advisory Committee has been developed to provide oversight on the curriculum and programmatic development. A Project Management Stakeholder Advisory Committee was also developed to provide project management practitioner input to the program. The Project Management Stakeholder Committee met monthly during year one because of the high interest of employer partners in developing and promoting the future project management workforce. The Project Management Stakeholder Committee continues to meet periodically and includes many representatives from Hanford companies as well as the various local Department of Energy Department of Energy organizations.

CBC Certificate and two-year Degree Project Management Program Overview

CBC's new one-year Project Management certificate and a two-year AAS degree in Project Management were approved by the SBCTC in July 2012. Students began enrolling in the program Fall 2012. Although the certificate is designed as a standalone one-year certificate, it is also the first year of the two-year degree. The two-year degree is the first two years of the proposed BAS degree in Project Management. The certificate and both degrees are based on the *Project Management Body of Knowledge Guide 5th Edition* (PMBOK® Guide) and are developed around the guide's five process groups and ten knowledge areas as identified by Project Management International (PMI). PMI is the

dominant Project Management professional organization and has developed certificates such as Project Management Professional (PMP®) and Certified Associate in Project Management® (CAPM®). The PMI knowledge and process areas are identified in Figure 4.

Figure 4: PMI Knowledge Areas

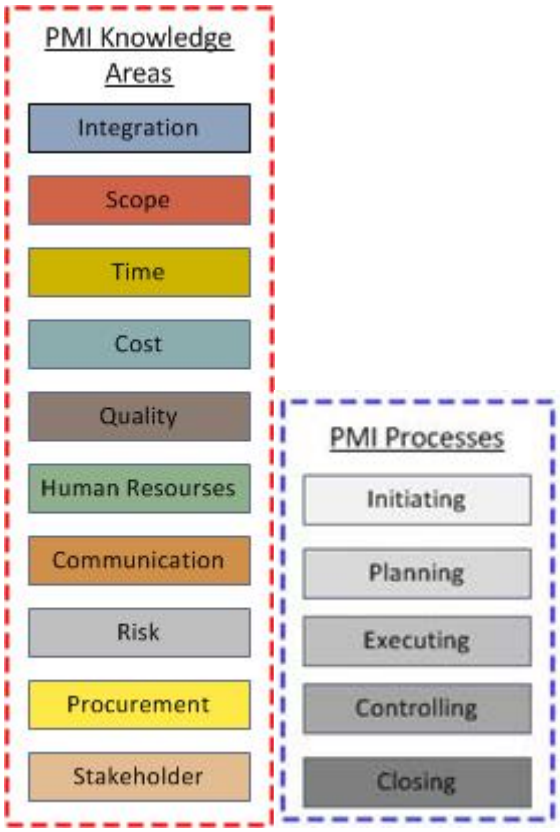


Table 1: Project Management AAS Degree Course Requirements

Project Management AAS Degree		
Major Courses (40 credits)		
PROJ 100	Intro to Project Management	5
PPOJ 110	Project Planning	5
PROJ 120	Project Execution & Control	5
PROJ 130	Intro to Project 2010 **or**	5
PROJ 140	Intro Primavera	5
PROJ 211	Project Procurement	5
PROJ 221	Project Integration & Communication	5
PROJ 231	Project Risk Management	5
PROJ 241	Project Management Capstone	5
	Credit Sub-Total	40
Major Support		
	Advisor approved Major Support courses	
	Credit Sub-Total	30-32
General Education (18-20 Credits)		
English		
ENGL& 101	English Composition	5
Math	Advisor approved college level math course	5
Psychology or Sociology (select 5 credits)		
PSYC& 101	General Psychology **or**	5
PSYC 201	Social Psychology **or**	5
SOC& 101	Intro to Sociology	5
Communication Studies (select 3-5 credits)		
CMST 101	Speech Essentials **or**	3
CMST 110	Communication Behavior **or**	3
CMST& 210	Interpersonal Communication **or**	5
CMST& 220	Public Speaking **or**	5
CMST 260	Multicultural Communication	5
	Credits Sub-Total	18-20
	Total Credits	**90**

Federal Department of Energy funding for the Project Management Program has enabled the program to equip a high quality computer lab and provide access to the full range of Primavera software that makes up their comprehensive enterprise project portfolio management solution as well as Microsoft Project software. Federal funding has provided an opportunity to develop unique program characteristics that are identified later in this document.

1.4 General Education Requirements

The BAS degree in Project Management general education requirements are designed to meet several different expectations. These include the BAS general education guidelines, general education required by the CBC workforce programs, and course selection options established by CBC's transfer distribution degree course options (see Appendix B). Finally, the requirements must help prepare and support students for the rigors of the BAS Project Management Program and the workplace needs after degree completion. Two-year workforce students will have English Composition (ENGL&101) and a psychology or sociology course and possibly other courses, depending on the student's background, that will count toward the BAS general education requirements. Table 2 provides an overview of Instruction Committee approved guidelines as well as how CBC has translated those guidelines into the specific BAS degree in Project Management general education expectations.

Table 2: Project Management General Education Requirements (60 Credits)

Distribution Area	**SBCTC BAS General Education Requirements**	**CBC Project Management BAS General Education Requirements**	**CBC Credits Requirements**
Communications Skills	10 credits	**ENGL& 101** English Composition (5 credits) **ENGL 410** Professional & Organizational Communication (5 credits)	10 credits
Quantitative/Symbolic Reasoning Skills	5 credits	**MATH& 107** Math in Society or any math MATH& 141 or higher (except MATH& 171) (5 credits)	5 credits
Humanities	10 credits	**ICS 310** American Diversity (5 credits) **PHIL 305** Professional Ethics (5 credits)	10 credits
Social Science	10 credits	PSYC& 100 or any approved Social Science courses from DTA distribution list as needed (5 credits) **ECON 305** Managerial Economics (5 credits)	10 credits
Natural Science	10credits	Lab science from DTA distribution list (see Program advisor for best selection) (5 credits) **ENVS 310** Environmental Issues	10 credits
Additional credits selected from distribution options	15 credits	Communication, Social Science, Humanities, ***or*** Math/Science from DTA distribution list (see Program advisor for best selection) (15 credits)	See above

1.5 Course work needed at junior and senior levels in the BAS

All required courses are listed in Table 3. Additional information about the project management courses including course descriptions and course outcomes, can be found in Appendix C.

Table 3: Project Management BAS Course Requirements

Project Management BAS Degree Course Requirements		
Major Courses (56 credits)		
PROJ 100	Intro to Project Management	5
PROJ 110	Project Planning	5
PROJ 120	Project Execution & Control	5
PROJ 130	Intro to Project 2010 –**OR-**	5
PROJ 140	Intro Primavera	5
PROJ 211	Project Procurement	3
PROJ 221	Project Integration & Communication	3
PROJ 231	Project Risk Management	5
PROJ 310	Project Contracts & Legal Issues	5
PROJ 320	Project Monitoring, Control, & Earned Value	5
PROJ 330	Project Human Resource Management & Communication Skills	5
PROJ 411	Advanced Project 2010 **–OR-**	5
PROJ 421	Advanced Project Primavera	5
PROJ 480	Project Management Capstone	5
	Credit Sub-Total	56
Major Support (64 credits)		
	Advisor approved Major Support courses	
	Credit Sub-Total	64

General Education (60 Credits)		
Communication (10 credits)		
ENGL& 101	English Composition	5
ENGL 410	Professional & Organizational Communication	5
Quantitative Symbolic Reasoning (5 credits)		
MATH&145	Statistics	5
Social Science (select 10 credits)		
PSYC& 100	General Psychology **or** approved SS from DTA distribution list	5
ECON 305	Managerial Economics	5
Humanities (select 10 credits)		
ICS 310	American Diversity	5
PHIL 305	Professional Ethics	5
Math/Science (select 10 credits)		
	Lab Science approved from DTA distribution lab science list	5
ENVS 310	Environmental Issues	5
Additional distribution credits from DTA distribution list (select 15 credits)		
	Select from the Communication, Social Science, Humanities, ***or*** Math/Science DTA distribution list (see Program advisor for best selection) (15 credits)	15
	Credits Sub-Total	60
	Total Credits	**180**

The upper division BAS degree courses in Project Management will be delivered in the evening, online and a hybrid mode. Although a number of the students will be working, some could choose to attend full-time. Table 4 illustrates a full-time load with the recommended sequence of core program management courses and suggestions as to how the general education courses could best be integrated into a full-time schedule. It is expected that a student will already have taken ENGL&101, a math class that will count as a Quantitative/Symbolic Reasoning Skills course, and a psychology or sociology course.

Table 4: Sample Full-time Program Management Course Schedule

	Fall	Winter	Spring
Third Year (Junior)	PROJ 310 ENGL 410 Gen Ed Distribution class	PROJ 320 QS/SR Course Major Support as Needed	PROJ 330 PHIL 305 Major Support as Needed
Forth Year (Senior)	PROJ 411 or 421 ECON 305 Gen Ed Distribution class	ICS 310 Lab science from DTA distribution list	PROJ 480 ENVS 310 Gen Ed Distribution class

Table 5 illustrates a part-time load with the recommended sequence of core program management courses and suggestions as to how the general education courses could best be integrated into a part-time schedule.

Table 5: Sample Part-time Project Management Course Schedule (The last two years finished in three years)

	Fall	Winter	Spring
Third Year	PROJ 310 ENGL 410	QS/SR Course Major Support as Needed	PROJ 320 PHIL 305
Forth Year	ECON 305 Gen Ed Distribution class	PROJ 330 ECON 305	ICS 310 Gen Ed Distribution class
Fifth Year	PROJ 441 or 421 Gen Ed Distribution class	ENVS 310 Major Support as Needed	PROJ 480 Lab science from DTA distribution list

The courses and program are designed to integrate technology into the coursework and support a hybrid instructional model. This is the type of environment that students may experience in the work world. Group projects will encourage students to get to know other students as well as refine their teamwork skills. Group projects will also use technology to create "virtual teams" so students can work synchronously and asynchronously on their assignments. To help build team skills, the Project Management Program will also use "social networking" software. Social networking will support student interaction beyond a weekly class meeting so Project Management students will get to know each other.

To support the hybrid approach, each class will have a course website via a learning management system. The course site will offer students and faculty opportunities to have course discussions and the delivery of course content that extends well past the face-to-face time in the classroom. The asynchronous discussion will keep students engaged beyond the classroom. The use of Tegrity recording software will offer students the opportunity to replay all or a portion of each class session. Students can download their class session for viewing at their convenience.

Criteria 2. Qualified Faculty

CRITERIA	STANDARD
2. Qualified faculty.	Provide a profile, including education credentials, of anticipated faculty (full-time, part-time, regular, and continuing) that will support the program for each year (junior and senior). Include faculty needed to cover the technical course work, general education courses and electives. In addition, provide the total faculty FTE allocated to the program. Faculty and administrators responsible for technical courses must meet certification requirements for professional and technical administrators and instructors in the Washington Administrative Code.

The current CBC Project Management Program has one full-time instructor with over 30 years of expertise in varying areas of the project management field. Since this instructor has worked much of his life in the Tri-Cities and has been an active member of the local project management professional

organization, he is very familiar with many of the project management professionals in the CBC service district. With his community knowledge and contacts, numerous adjuncts are being identified that will be able to teach the 100-400 level courses.

Table 6: Core Project Management Faculty		
Faculty Name	**Credentials**	**Courses Qualified to Teach**
Curtis, Lawrence	A.A.S. Mechanical Technology, Iowa Western Community College Pursuing M.B.A Concentration: Strategic Management, State University of New York Pursuing Doctorate in Business Administration, Walden University	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 211**-Project Procurement **PROJ 310**-Project Contracts & Legal Issues
Edwards, Brad	B.S. Marketing, California State University M.S. Contract and Procurement Management, St Mary's College	**PROJ 211**-Project Procurement **PROJ 310**-Project Contracts & Legal Issues
Gadd, Rod	B.S. Chemical Engineering Washington State University M.S. Project Management, City University	**PROJ 100**-Intro to PM **PROJ 110**-Project Planning **PROJ 120**-Project Execution & Control **PROJ 211**-Project Procurement **PROJ 221**-Project Integration & Communication **PROJ 231**-Project Risk Management **PROJ 241**-Project Management Capstone **PROJ 310**-Project Contracts & Legal Issues **PROJ 320**-Project Monitoring, Controls, & Earned Value **PROJ 330**-Project Human Resource Management & Communication Skills **PROJ 480**-Advanced Project Management Capstone
Flores, Jimmie	Ph.D. in Human and Organizational Development Doctor of Management (DM) in Information Systems and Technology M.S. in Management M.S. in Non-Profit Management M.A. in Human and Organizational Systems M. Ed. In Curriculum, Instruction, and	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 221**-Project Integration & Communication **PROJ 330**-Project Human Resource Management & Communication Skills

	Assessment M.S. Educational Technology M.S. Computer Information Technology M.B.A Areas of Concentration: Finance, Marketing and Management B.B.A Major: Corporate Financial Management	
Kennedy, Mike	B.S. Mechanical and Nuclear Engineering Ohio State University M.S. Nuclear Engineering Ohio State University Ph.D. Nuclear Engineering Texas A&M University	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 221**-Project Integration & Communication **PROJ 231**-Project Risk Management **310-Project Contracts & Legal Issues**
Payne, Jim	B.S. Economics University of Washington SME in Primavera	**PROJ 130**-Intro MS Project **PROJ 140**-Intro to Primavera **PROJ 411**-Advanced Microsoft Project **PROJ 421**-Advanced Primavera
Penn, Steven	D.M. University of Maryland University College—Management M.B.A. Frostburg State University B.A. University of Texas at Arlington—Math and Russian	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 211**-Project Procurement **PROJ 221**-Project Integration & Communication **PROJ 320**-Project Monitoring, Controls, & Earned Value
Ramirez, Joshua	M.S. Management, Colorado Technical University B.A. Business Administration Major: Accounting/Finance, American Intercontinental University B.A. Business Administration Major: Management, American Intercontinental University	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 320**-Project Monitoring, Controls, & Earned Value
Shattock, Ann	B.S. Mechanical Engineering, Washington State University	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control **PROJ 211**-Project Procurement **PROJ 221**-Project Integration & Communication
Steele, Robert	Pursuing Doctorate Industrial/System and Engineering Management, Texas Tech University M.B.A Indiana Wesleyan University B.S. Electrical Engineering, Washington State University	**PROJ 100**-Intro to PM **PROJ 120**-Project Execution & Control

Swannack, Russell	B.S. Computer Science, Washington State University M.S. Technology Management, Washington State University	**PROJ 120**-Project Execution & Control **PROJ 221**-Project Integration & Communication **PROJ 320**-Project Monitoring, Controls, & Earned Value

The BAS degree in Project Management general education courses will generally be taught by CBC faculty prepared at the doctorate level in their discipline. Table 7 illustrates the background of faculty who will teach the general education courses. Faculty are very interested in teaching at the 300 and 400 level since the courses are designed not only to build general education knowledge but are also taught within a specific context that is well matched to the instructors' interests. In addition, the experience with the BAS degree in Applied Management students provide evidence that BAS students are well-prepared and highly motivated at a level that is not always manifested in lower division courses. As many of the social science, humanities, and math/science faculty at CBC are doctorate prepared, there are numerous faculty from which to choose.

Table 7: General Education Faculty

Faculty Name	**Credentials**	**Courses Qualified to Teach**
Chakrabarti, Debjani	Ph.D. Mississippi State University—Sociology M.A. Delhi School of Economics	ICS 305 American Diversity
Kincaid, Matt	Ph.D. Gonzaga--Leadership B.A. & M.B.A. Gonzaga--Business	PHIL 305 Professional Ethics AMGT 417 Communications
Thonney, Teresa	Ph.D. University of Washington--English B.A. & M.A. Eastern Washington University	ENGL 410 Professional & Organizational Communication
Paddock, Don	M.B.A Syracuse University B.S. Cornell University	ECON 305 Managerial Economics

Administration and Administrative Support Staff

The administration and administrative support staff are listed in Table 9. The dean is experienced with BAS Programs as she was one of two individuals leading the request for the current CBC BAS degree in Applied Management (BAS-M); she designed the BAS-M, and supervised the BAS-M degree startup as well as continues to supervise the program operations.

Administrative Staff	Role	Credentials
Crawmer, Andrew	Director for Department of Energy Cooperative Grant	M. Ed. Washington State University B.S. Corban University
Lopez, Anthony	Project Management Outreach Retention Specialist	B.A. Washington State University
Meadows, Deborah	Dean	D.M. University of Maryland University College---Management Ed. D. International Graduate School—Counseling Psychology M.Ed. University of Idaho—Counseling Psychology B.S. University of Idaho—Education

Criteria 3. Admissions Process

CRITERIA	STANDARD
3. Selective admissions process, if used for the program, consistent with an open door institution.	• Describe the selection and admission process. Explain efforts that will be used to assure that the program serves as diverse a population as possible.

Open Access

Columbia Basin College operates under an open admission policy granting admission to all applicants who are 18 years of age or older and/or graduated from high schools accredited by a regional accrediting association (Administrative Policy 7-010). The Mission Statement specifically mentions CBC's commitment to diversity, fairness, and equity. This mission extends to the BAS Project Management Program. The College's values also will apply to the BAS Project Management Program, and therefore will guide the program's selection process. One of the goals of the selection process is that BAS-P participants will mirror or exceed the student diversity in the project management feeder programs. To help meet this goal, a set of admissions criteria, an applicant selection process, and a

participant monitoring and tracking system will support the BAS-P admission process. In addition, the Project Management Outreach Retention Specialist will develop and deploy a recruiting program that is designed to attract a diverse applicant pool beginning at the two-year level and extending to the 300-400 level.

Selection Process

The student selection process will be conducted by the BAS Project Management Admissions Committee. The committee's membership includes the BAS Faculty/Program Lead, the Project Management Outreach Retention Specialist, and the dean responsible for the BAS Project Management Program. The selection committee will first review each application packet to identify those who meet the admissions criteria. If the qualifying applicants can be accommodated into the upcoming quarter, no further selection will be necessary.

If the number of qualified applicants exceeds space availability, the selection committee will then proceed to a process of evaluating the individual applicants on specific criteria and identifying those to be invited to participate. This process will include:

1 A thorough review of each application, including transcripts, admissions forms, essays, letters of recommendation and other available documentation.
2 Development of quantified ratings of each applicant on specific dimensions by each committee member. These dimensions may include relevance of career goals, strength of transcript, relevance of work experience, and strength of the personal statement. Prior to selection of an initial cohort, these selection dimensions will have been identified, definitions developed, behaviorally-based rating scale developed, and committee members normed to use the dimensions in a reliable and valid manner.
3 Review and discussion of the ratings of each applicant by the committee. Where significant disagreement exists regarding ratings for an applicant, the committee will review the applicant's data and reach a consensus on the rating.
4 Identify the top candidates, based on the ratings will be rank order sufficient to fill available spaces. A waiting list of candidates will also be developed in case not all of those selected subsequently enroll in the program.

Program Support for Diversity

CBC is a designated Hispanic Serving Institution. Franklin County, one of the counties in CBC's service district, is the first Washington State County where the percentages of Hispanic citizens exceed the White Non-Hispanic population.

A key goal for the BAS Project Management Program is to maintain the diversity levels of the AAS Project Management feeder programs. The Project Management Outreach Retention Specialist and the Office of Diversity and Outreach will work closely with the BAS-P Program faculty in this effort. The goal of the CBC Diversity and Outreach Office is to ensure that underrepresented members of our community have fair and equitable access to post-secondary education. This office will help provide the resources to maintain recruitment and retention of diverse students within the BAS-P Program. Outreach efforts will include disseminating BAS-P information to local businesses, both to inform AAS graduates about project management opportunities and to educate the business community regarding the upcoming availability of BAS-P graduates.

Other activities will include involvement in Multi-Cultural College Night, developing key relationships and BAS-P focused presentations with school districts that maintain large diverse student populations, and hosting events that inform students, parents and the community about the CBC BAS degree in Project Management Program. Additionally, efforts will be made to qualify and register BAS-P students into federally funded support programs that best fit their needs. By communicating with minority students currently involved in AAS programs, through outreach with qualified minorities within the community, and by educating employers about the benefits of hiring and promoting BAS-P graduates; CBC anticipates maintaining or improving the relative proportion of minority students within the current project management pool and specifically in the BAS-P Program.

CBC monitors the representation of minorities within the current BAS degree in Applied Management and all lower division programs on a regular basis and will extend that effort to all new BAS programs. CBC will modify application and selection procedures, as needed, if problems are

found. Figure 5 illustrates CBC's student ethnicity and reflects the changing community demographics' impact on ethnicity of CBC's students. Table 8 lists the numbers of minorities in each AAS Program.

Figure 5: CBC's Student Ethnicity

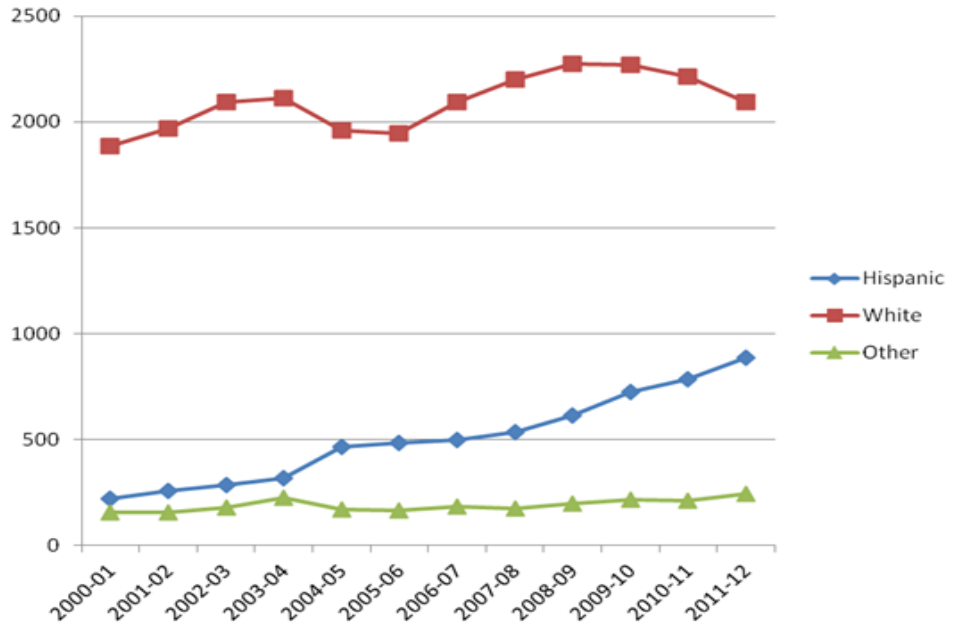


Table 8: Representation of Minorities in each AAS Program

Program	Asian/Pac Isl	African Am/Black	Native Am/Alsk Nat	Hispanic	Other	White
Business Administration	3	1	3	25	0	76
Dental Hygiene	1	3	0	29	0	97
Associate Degree Nursing	10	5	5	66	0	286
Radiological Tech	3	4	1	30	0	92
Paramedic	2	1	0	3	0	110
Medical Assistant	3	1	1	6	0	28
Early Childhood Education	1	0	0	39	0	46
Computer Science	2	0	0	8	0	73
Programmer	0	1	0	2	0	8
Internet Specialist	0	0	0	0	0	3
Network Administrator	0	0	0	1	0	9
Engineering Technology	5	0	2	10	0	62
Automotive Technology	1	3	0	10	0	27
Machine Technology	0	0	1	2	0	13
Welding Technology	1	2	2	13	1	86
Fire Science	0	0	0	3	0	42
Criminal Justice	0	0	1	12	0	43
Total	32	21	16	259	1	1101

Criteria 4. Appropriate Student Services Plan

CRITERIA	STANDARD
4. Appropriate student services plan.	Describe services that will be needed by the students admitted to the degree program and the college plan for providing those services. Include a description of financial aid services and academic advising for students admitted into the program.

To support the Project Management BAS students, CBC has hired an Outreach Retention Specialist for the program to provide a focused student support system and recruiting program for students. The BAS Project Management Outreach Retention Specialist will assist in identifying future Project Management BAS students, maintain student records, provide program advising, provide retention services, identify and support internships and shadowing experiences, and assist Project Management students in accessing other student support services as needed.

The Project Management BAS student services efforts are specifically designed to meet the needs of the adult BAS student that is working, going to school in the evenings, and taking courses through blended learning. These students will be busy, and likely need assistance to keep engaged, focused, avoid feeling overwhelmed, and avoid the feeling of isolation while engaged in the distance learning portion of their program.

The BAS Project Management Outreach Retention Specialist and the program instructors will do academic advising and educational planning for the BAS-P student. These program experts will ensure that students receive clear, consistent, and accurate information. A specific BAS-P advising website, to be used with the current CBC online advising site, will also be designed for the students. Students will be trained how to use the site and therefore have 24/7 access to online advising/registration services.

The retention strategies will emphasize both “high touch and high tech.” The “high touch” strategy will begin with one-on-one time with the BAS-P Outreach Retention Specialist and the BAS-P faculty members. The staff and the faculty for the BAS program will get to know each student so students feel the program staff understands them and are committed to their success. The BAS-P Outreach Retention

Specialist will be the main contact for many of the students' needs so a student has only to ask for help from the BAS-P Outreach Retention Specialist. The Specialist will either offer personal help or coordinate with other student services staff to provide what is needed. In addition, the BAS-P Outreach Retention Specialist will try to anticipate what the students individually or what the group might need and provide student options. At the beginning of each year, the BAS-P Outreach Retention Specialist will coordinate a gathering that will provide an initial opportunity for students to get to know each other, meet instructors and administrative support staff, and help the student anticipate their BAS experience.

The "high tech" efforts will come in many ways. Since this is a high tech program and will be designed with integration of eLearning tools into each class, the BAS-P Outreach Retention Specialist will also integrate the use of technology in advising and communication. CBC has recently added AgileGrad software to help support the advising process. Students will experience the use of technology seamlessly throughout the program. Social media will be used to communicate with students, a program specific webpage supporting BAS Project Management students and the new campus SharePoint portal will be used extensively.

The Outreach Retention Specialist will report directly to the BAS Project Management Director and the program dean. She/he will provide information to the Project Management instructional staff, and liaison with campus student services departments. The specialized student support model will provide student services continuity for evening students and will ensure that Project Management students receive assistance from a staff person that is an expert on the CBC BAS Project Management Program. The Outreach Retention Specialist will help students access campus student services as well. Examples of campus student services include the following:

- **Hawk Central:** One-stop student support is available to all CBC students at a newly developed service called Hawk Central. Designed as a one-stop center for student support, students can drop by during designated hours for student assistance and problem solving. Staff is cross-trained in all student services and can provide much of what students need such as cashiering, advising, financial aid, and other campus information. Staff can also quickly refer students to additional specialized services as needed.

- **Online Services:** CBC's newly redesigned website provides online access to campus services such as career information, online registration, financial aid support, student records, and eTutoring. Services are available 24/7 for students not able or interested in driving to campus for face-to-face services.

- **Tutor Center:** High performing project management students will be recruited to assist students in mastering project management skills. Writing and math tutors are already in place to help students that are struggling or seeking to expedite their skills. A math lab is adjacent to the Tutor Center and online or etutoring is also available.

- **Financial Aid**: The CBC Financial Aid Office is committed to providing a comprehensive financial aid program for BAS students who have need, apply on time, and meet other requisite conditions for financial aid. CBC offers aid, including loans, work study, and grants or scholarships, to meet the BAS student needs. The Financial Aid Office has provided the current BAS Applied Management students financial aid services for four years. The new BAS Project Management students will have the same access as experienced by the current BAS Applied Management students.

- **Resource Center:** The CBC Resource Center will provide assessment and support accommodations for BAS students with documented disabilities. The Center has testing space and the staff coordinates testing for disabled students and assists faculty to provide appropriate accommodation. The Center provides evening hours as needed.

- **Veteran's Services:** As veterans in general are identified as having experiences that help provide a mindset that enhances project management professionals focused, recruiting efforts may increase the percentage of veterans in the Project Management Program. The CBC campus is recognized as a veterans friendly campus and has specific support services through a drop-in center, specialized veterans financial support, personal counseling services, and specialized veterans services.

- **Placement:** As part of the recruiting plan, the BAS Student Services Specialist will also work closely with the Project Management Advisory committee and CBC Student Placement Services to become familiar with the types of businesses that would have need of a project management prepared student. This early and ongoing networking will provide the ground work for a successful placement effort both for internships as well as the placement after program completion.

  Since a number of the BAS students might opt for an internship experience or will already be working, special attention will be paid to assist students to use their experiences to network or seek initial employment or work with their current employer to identify promotional options.

  The students will be invited to the annual CBC Placement Fair and will have access to CBC workshops on interviewing, resume writing, etc. The CBC Student Placement services have pledged to provide placement assistance to all BAS students. CBC will also have the support of the local WorkSource (who has been recognized nationally as "WorkSource of the Year").

- **Library Services**: Although all of the campus librarians will provide services for the project management students, one of the four librarians will be the designated to support the program. Project management is a quickly evolving discipline so resources are likely to be digital in the form of newly published government reports, publication databases, websites supporting project

management, and Listservs. The designated librarian will be an important partner in the Project Management Program information delivery and research support. A number of newly published books on related topics will be purchased immediately and ongoing purchases will be made in the future for the library collection. One hundred and fifty lap tops are also available for student checkout from the Library Circulation Desk. The library maintains day, evening, and Saturday hours.

- **Internet Access and Technology Support**: As one of the first Washington community colleges with Wi-Fi, all students have access to campus networks. Multiple campus sites have networked printers and students also have access to a predesignated level of free copies each quarter. A large open student computer lab is available inside the campus library.

- **Student Study Space:** Although the library has individual and group student study space, the campus has multiple designated spaces for individual and group study throughout the campus. Wi-Fi access and electrical outlets encourages and supports the use of student technology (BYOD, bring your own device). This is especially true for the business building that has atrium-like study areas at both ends of the building.

- **eLearning:** CBC has a robust online program that is supported by two highly qualified experts. They are available to students for technology trouble-shooting.

In summary, the BAS Project Management student services program is designed to provide students with a combination of the personal attention from the Outreach Retention Specialist, services from the campus student services program, and support from the Project Management faculty and other Project Management staff. In addition to the personal attention, students will also be provided with virtual support services.

Criteria 5. CBC Commitment to build and sustain a high quality program

CRITERIA	STANDARD
5. Commitment to build and sustain a high quality program.	Provide a financial plan for the first five years of program operation. This plan should include (1) types of funds to be used to support the program; (2) program expenses; (3) appropriate facilities to be used; (4) equipment, technology, and instructional resources needed for the program. Document the college's ability to sustain the program over time.

5.1 Revenue and Funds to Sustain the Project Management Program

The Project Management BAS Program is designed as a self-support program sustained by BAS level tuition from Project Management Program students, project management student fees, shared

hardware and software resources from the existing project management instructional program, partnership funding or in-kind services opportunities from community businesses and organizations, and grant support.

The program has the benefit of federal funding from the Department of Energy supplementing the development and delivery of a new Project Management Program. By the end of the grant, CBC's capacity will have been established in a way that promotes sustainability of the program to continue providing opportunities and training for participants interested in the Project Management Program. The Department of Energy Grant will have assisted CBC and its partners to develop the AAS and BAS Project Management degrees to address local, statewide and national workforce shortages.

Revenue Projections

	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18
Tuition & Fees	$0	$206,344	$388,624	$388,624	$388,624	$388,624
Department of Energy Grant	$323,200	$100,931	$100,931	$100,931		
Total	$323,200	$307,275	$489,555	$489,555	$388,624	$388,624

5.2 Project Management Program Expenses

As additional evidence of institutional commitment to the BAS Project Management Program, the dean oversight and clerical support will not be charged back to the BAS Project Management Program nor will indirect or overhead costs be assessed to the program.

Expenditure Projections

	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18
BAS Director		$50,000	$50,000	$50,000	$50,000	$50,000
F/T Instruction		$64,167	$64,167	$64,167	$64,167	$64,167
P/T Instruction		$11,656	$11,656	$11,656	$11,656	$11,656
Outreach Recruiting Specialist	$40,000	$40,000	$40,000	$40,000	$40,000	$40,000
Benefits	$15,200	$70,000	$70,000	$70,000	$70,000	$70,000
Program Development	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Back to Industry		$10,000	$28,000	$28,000	$28,000	$28,000
Travel		$5,000	$5,000	$5,000	$5,000	$5,000
Registration/ Fees		$2,000	$2,000	$2,000	$2,000	$2,000
Recruiting Materials		$6,000	$6,000	$6,000	$6,000	$6,000
Books/Supplies	$5,000	$10,000	$10,000	$10,000	$10,000	$10,000

Tutoring		$2,500	$2,500	$2,500	$2,500	$2,500
Equipment	$225,000	$15,000	$15,000	$15,000	$15,000	$15,000
Total	$289,200	$290,323	$308,323	$308,323	$308,323	$308,323

5.3 & 5.4 Program Facilities, Equipment, Technology, and Instructional Resources

A business education building was completed on campus in 2009. The current AAS Project Management Program is housed in this building and there are sufficient facilities to also house the upper division program in the building. Many equipment upgrades were completed as a result of the Department of Energy grant funding. Within the business building, a computer lab was outfitted with 29 new computers, and two classrooms were set-up with distance learning equipment. These classrooms will allow students to remotely connect to courses while the courses are in session. The AAS and BAS Project Management Programs will share these facilities. And when available, other programs on campus will be able to use them. Up-to-date project management software licenses for project management and SharePoint software have been purchased for the computer lab and six dedicated laptop computers. The SharePoint software will be available for campus wide use beyond the Project Management Program.

5.5 College Commitment to the Project Management Program

CBC is committed to developing and maintaining the BAS degree in Project Management. The need for the program is especially acute in CBC's service district; it is a natural progression for many of CBC's two-year project management graduates. Students, employers, advisory and stakeholder committee members are strongly supportive of the degree. The decision to seek a BAS degree in Project Management and subsequent preparation for the degree began several years ago. The BAS degree in Project Management will help to meet current and future employment needs for CBC's service district of Benton and Franklin counties. A strong infrastructure for the Project Management Program has been built with the support of the Department of Energy funding. CBC is committed to continue to support these programs into the future.

Criteria 6. Program Specific Accreditation

CRITERIA	STANDARD
6. Program specific accreditation.	Indicate whether the institution will seek specialized program accreditation. If so, describe plans for accreditation and identify appropriate accrediting body.

Both the AAS and BAS degrees in Project Management are based on the Project Management Body of Knowledge Guide 5th Edition (PMBOK® Guide) and are developed around the guide's five process groups and ten knowledge areas as identified by Project Management Institute (PMI). Recognized world-wide, the Project Management Institute is one of the largest not-for-profit organizations promoting and improving the profession of project management. PMI has member chapters all over the world. A very active chapter is located in the Tri-Cities. Because PMI has set the global standard for project management, certification from PMI demonstrates an independently evaluated knowledge as well as a commitment to the profession and ability to successfully perform the work of a project manager. CBC will seek PMI accreditation for the BAS degree in Project Management. The accreditation will provide additional evidence of program quality. Currently, the only PMI accredited project management program in the state is City University School of Management M.S. in Project Management located in Seattle.

Students who successfully complete the CBC BAS degree in Project Management will have the project management knowledge necessary to take the industry standard certification exam for which they are eligible. The CAPM® is the initial certification available from PMI. After 23 hours of project management instruction, the student can apply to take the CAPM® exam at their own expense. After students graduate and have been working as a project manager for a certain number of years, they will be eligible to sit for the Project Management Professional (PMP®) exam. When PMI accreditation has been granted, students are able to apply their degree or 1500 hours toward their project experience as part of the 4500 total hours in leasing and directing projects in order to apply for their PMP.

Typical of a specialized accreditation process, PMI accreditation requires programs requesting initial accreditation have at least one graduate from the program prior to the program's accreditation visit. Given the accreditation process takes approximately 18 months, the BAS Project Management Program will begin the self-study process in Fall 2013. The timing for the PMI accreditation visit will be arranged for the September-December 2015 time period immediately following the academic year after the first Project Management student is expected to graduate in Spring 2015. CBC plans to complete the accreditation process in late 2015 or early 2016. Upon the approval for PMI accreditation, students initially enrolled in the BAS Project Management Program will retroactively be considered to have graduated from a PMI accredited program.

Criteria 7. Educational Pathways Beyond the BAS Degree

CRITERIA	STANDARD
7. Pathway options beyond baccalaureate degree.	Describe opportunities and articulation agreements for the place-bound BAS graduates to continue their education onto a graduate (Master's) degree program.

There are no local on-campus master degree programs in project management. Place-bound students can select from several options for online universities that have project management degree programs. Table 9 lists a few of the online options available to students who would like to continue onto a master degree program in project management.

Table 9

Institution	Location	Related Degree	Comments
University of Phoenix (Private For-Profit College, Regionally Accredited)	Online	MBA in Project Management	
City University, Seattle	Online	MS in Project Management	PMI Accredited Program
Colorado Technical University	Online	MBA in Project Management	PMI Accredited Program
Boston University	Online	MS in Project Management	PMI Accredited Program
St. Mary's University, Minnesota	Online	MS in Project Management	PMI Accredited Program

Criteria 8. Expert Evaluation of Program

CRITERIA	STANDARD
8. External expert evaluation of program.	The institution will select two external experts to review the program. In a separate document, provide copies of external evaluators' reports or letters. Summarize the institution's responses and subsequent modifications to the proposal based upon evaluator's recommendations. Attach a short bio of the evaluators.

External Expert Response #1: **Linh Luong**
Program Director/Faculty
City University of Seattle

Linh Luong is the Program Director/Faculty for the B.S. and M.S. Project Management program at City University of Seattle. She developed the B.S. Project Management program for City University. She has nine years of experience in the project management field. As a project manager she worked for VMC Consulting and Business Process Initiatives Consulting. Linh is active in PMI and PMP certified. Because of her experience and knowledge of PMI requirements, she participates in accreditation of universities as a PMI GAC accreditor.

Education:

M.B.A with concentration in Marketing – University of Texas
M.S. in Management Information Systems – University of Texas
B.A. in Government and Political Science – University of Texas.

External Expert Response #2:

Summary

Columbia Basin College proposes to implement a Bachelors of Applied Science degree in Project Management beginning Fall 2013. From the previously approved Form B and this proposed Form D, the College believes it meets or exceeds the following requirements for BAS approval:

- The capacity to commit necessary resources for program success;
- The delivery of courses that will meet the current and emerging needs for the project management workforce;
- The ability to engage highly qualified faculty to develop and deliver the project management curriculum;
- The identified curriculum prepares students for additional education beyond the bachelors level;
- A student selection process that supports the selection of a diverse student population;
- A robust student services program to support student success;
- Plans to seek specialized program accreditation;
- A review completed by subject matter experts and Program was modified as appropriate
- The documented demand for the Program in CBC's service area;
- The need for cost-effective access to a baccalaureate Program for place-bound students that builds on current project Management two-year degrees; and
- A program that fills a gap in education options offered by the public four-year institutions in the geographic area.

Columbia Basin College has demonstrated, through a variety of other workforce Programs, academic Programs, and an already successful BAS in Applied Management its capacity to deliver high-quality, cost-effective educational programs for Benton and Franklin counties.

The degree will provide students with project management training while at the same time opening the doors to the students for promotion and higher wages. Students, organizations, and businesses, as well as the community, will gain substantially as a result of implementing this high-demand Program.

CBC has a highly qualified faculty and other community experts with strong academic and applied experience to provide high-quality teaching and project management education and training. A creative and thoughtful curriculum has been developed to meet program goals. Critical support elements, such as the capability for advising and placement, are in place. A thorough plan for conducting formative and summative program evaluations, and for using the data for continuous improvement, has been developed. Finally, the proposed BAS in Project Management program is

unique to and vital for the Columbia Basin region and offers considerable benefits to a variety of students, employers and the community without intruding on or duplicating the goals or mission of other educational Programs in the region. In addition, the Program will provide an opportunity for a program management focused degree to be implemented in the eastern region of the state.

Appendix A: BAS in Applied Management at CBC

Columbia Basin College (CBC) was authorized to offer a Bachelor in Applied Management (locally known as BAS-M) beginning Fall 2009. CBC was part of the second round of BAS degrees approved in Washington State. To support the BAS degree, the College was granted 40 FTES funded at the bachelor level and was also granted development funds. Northwest Commission on Colleges and Universities (NWCCU) extended CBC's accreditation approval to bachelor level January 2011. Each year of operation the program has grown, exceeding the FTE program goals on an annual basis. In June 2011, it was decided to double the size of the Program for a total of 80 FTES. Table 14 provides an overview of program growth and graduation levels.

To accomplish that task, 20 FTES were added at the junior level for 2011-2012 and another 20 FTES at the junior level was added in Fall 2012. The current goal is to operate at approximately 80 FTES on an annual basis. To support a program of 80 FTES and to maintain the quality of the original lower division program, additional faculty has been added. The additional staff include three faculty that consist of one with a PhD in Leadership; one with a MBA and multiple years in the world of business; and finally another faculty member with a JD, a BS in Business, and an MBA. The dean responsible for the program also completed a second doctorate in Management. BAS-M assistant director has also been working on a doctorate since the BAS Program has begun and is now ABD in Adult Learning in Higher Education.

The success of the original BAS program helps demonstrate the level of commitment CBC has for their first BAS degree and the College's willingness to maintain a quality program that will extend to the operation of a second BAS degree in Project Management.

Table 14: CBC's BAS in Applied Management Enrollment and Graduation Levels

Academic Year	FTE Goal	Actual FTES**	Graduates
2009-2010*	20	29	
2010-2011	40	49	27
2011-2012	60	65	21
2012-2013	80	***	

*First Academic Year of CBC's BAS Applied Management Degree

**Annualized FTES

***Summer (32 FTES) & Fall FTES levels indicate the 2012-2013 enrollment goal will be accomplished

Appendix B: General Distribution Course Options

Communication

CMST 101 Speech Essentials [C]
CMST 110 Communication Behavior [C]
CMST&210 Interpersonal Communication [C]
CMST&220 Public Speaking [C]
CMST 260 Multicultural Communication [C]
ENGL&101 English Composition I [C]
ENGL&102 Composition II [C]
ENGL&235 Technical Writing [C]
ENGL 410 Professional & Organizational Communication [C]

Humanities

ARAB 121 Arabic [H]
ARAB 122 Arabic II [H]
ARAB 123 Arabic III [H]
ART& 100 Art Appreciation[H]
ART 116 Art History Ancient World [H]
ART 117 Art History Medieval-Baroque [H]
ART 118 Art History Modern Times [H]
ART 119 Art History of Asia [H]
ART 120 Art History Of the Americas [H]
ART 121 Women In Art [H]
CHIN&121 Chinese I [H]
CHIN&122 Chinese II [H]
CHIN&123 Chinese III [H]
CMST 246 Oral Interpretation [H]
DRMA&101 Intro to Theatre [H]
DRMA 215 Survey of Theatre History [H]
EFL 101 Written English Language I [H]
EFL 111 Written English Language II [H]
ENGL&111 Intro to Literature [H]
ENGL 140 The Cinema [H]
ENGL 160 Women's Literature [H]
ENGL 180 Multicultural Literature [H]
ENGL 195 Bible as Literature [H]
ENGL 203 Mythology [H]
ENGL 210 Intro to Linguistics [H]
ENGL&220 Intro to Shakespeare [H]
ENGL&236 Creative Writing I [H]
ENGL&237 Creative Writing II [H]
ENGL&244 American Literature I [H]
ENGL&245 American Literature II [H]
ENGL&246 American Literature III [H]
ENGL&254 World Literature I [H]
ENGL&255 World Literature II [H]
ENGL&256 World Literature III [H]
ENGL 257 English Grammar [H]
ENGL 264 English Literature [H]
ENGL 265 English Literature [H]
ENGL 266 English Literature [H]
ENGL 280 Gay and Lesbian Studies [H]
FRCH&121 French I [H]
FRCH&122 French II [H]
FRCH&123 French III [H]
FRCH&221 French IV [H]
FRCH&222 French V [H]
FRCH&223 French VI [H]
GERM&121 German I [H]
GERM&122 German II [H]
GERM&123 German III [H]
GERM&221 German IV [H]
GERM&222 German V [H]
GERM&223 German VI [H]
HEB 121 Hebrew I [H]
HEB 122 Hebrew II [H]
HEB 123 Hebrew III [H]
HIST&126 World Civilizations I [H]
HIST&127 World Civilizations II [H]
HIST&128 World Civilizations III [H]
ICS 120 Survey of Hispanic Culture [H]
ICS 125 Native American Culture [H]
ICS 130 Survey of Asian American Culture [H]
ICS 135 Survey of African American Cultures [H]
ICS 222 Columbia Basin Cultures [H]
ICS 310 American Diversity [H]
JAPN&121 Japanese I [H]
JAPN&122 Japanese II [H]
JAPN&123 Japanese III [H]
JAPN&221 Japanese IV [H]
JAPN&222 Japanese V [H]
JAPN&223 Japanese VI [H]
MUSC&105 Music Appreciation [H]
MUSC 116 History of Jazz [H]
PHIL&101 Intro to Philosophy [H]
PHIL&106 Intro to Logic [H]
PHIL 131 World Religions [H]
PHIL 150 Introduction to Ethics [H]
PHIL 305 Professional Ethics [H]
RUSS&121 Russian I [H]
RUSS&122 Russian II [H]
RUSS&123 Russian III [H]
SPAN 104 Intensive 1st Year Spanish [H]
SPAN 110 Beginning Spanish for Professionals [H]
SPAN 111 Intermediate Spanish for Professionals [H]
SPAN 112 Advanced Spanish for Professionals [H]
SPAN&121 Spanish I [H]
SPAN&122 Spanish II [H]
SPAN&123 Spanish III [H]
SPAN 205 Spanish for Spanish Speakers [H]
SPAN 206 Spanish for Spanish Speakers [H]
SPAN 207 Spanish For Spanish Speakers [H]
SPAN&221 Spanish IV [H]
SPAN&222 Spanish V [H]
SPAN&223 Spanish VI [H]
WS 155 Women's Cultural Heritage [H]
WS 160 Women in Literature and Art [H]

Mathematical & Natural Sciences

ANTH&205 Biological Anthropology [M/S]
ANTH 214 Biological Anthropology Lab [M/S]

ASTR&101 Intro To Astronomy w/ Lab [M/S]
ASTR&101L Intro To Astronomy Lab [M/S]
BIOL&100 Survey of Biology w/ Lab [M/S]
BIOL 120 Bioethics [M/S]
BIOL 140 Fundamentals of Botany [M/S]
BIOL 140L Fundamentals of Botany Lab [M/S]
BIOL 148 Plant Identification [M/S]
BIOL 148L Plant Identification Lab [M/S]
BIOL&160 ....General Biology w/ Lab [M/S]
BIOL&175 Human Biology w/ Lab [M/S]
BIOL 186 Extended Topics in Biology [M/S]
BIOL 186L Extended Topics in Biology Lab [M/S]
BIOL 201 Soils [M/S]
BIOL 201L Soils Lab [M/S]
BIOL&211 Majors Cellular w/ Lab [M/S]
BIOL&212 Majors Plant w/ Lab [M/S]
BIOL&213 Majors Animal w/ Lab [M/S]
BIOL 240 General Ecology [M/S]
BIOL 240L General Ecology Lab [M/S]
BIOL&241 Human A&P 1 w/ Lab [M/S]
BIOL&242 Human A&P 2 w/ Lab [M/S]
BIOL 250 General Genetics [M/S]
BIOL 250L General Genetics Lab [M/S]
BIOL 252 Insects of Economic Importance [M/S]
BIOL 252L Insects of Economic Importance Lab [M/S]
BIOL 253 Plant Pathology [M/S]
BIOL 253L Plant Pathology Lab [M/S]
BIOL 254 Plant Systematics [M/S]
BIOL 254L Plant Systematics Lab [M/S]
BIOL&260 Microbiology w/ Lab [M/S]
CHEM&110 Chemical Concepts w/ Lab [M/S]
CHEM&121 Intro to Chemistry w/ Lab [M/S]
CHEM&122 Intro to Organic Chemistry w/ Lab [M/S]
CHEM&123 Intro to Biochemistry w/ Lab [M/S]
CHEM&131 Intro to Organic/Biochemistry w/ Lab [M/S]
CHEM&140 General Chemistry Prep w/ Lab [M/S]
CHEM&161 General Chemistry I w/ Lab [M/S]
CHEM&162 General Chemistry II w/ Lab [M/S]
CHEM&163 General Chemistry III w/ Lab [M/S]
CHEM&241 Organic Chemistry I [M/S]
CHEM&242 Organic Chemistry II [M/S]
CHEM&243 Organic Chemistry III [M/S]
CHEM&251 Organic Chemistry I Lab [M/S]
CHEM&252 Organic Chemistry II Lab [M/S]
CHEM&253 Organic Chemistry III Lab [M/S]
CHEM 254 Quantitative Analysis [M/S]
CHEM 255 Instrumental Analysis [M/S]
CHEM 264 Quantitative Analysis Lab [M/S]
CHEM 265 Instrumental Analysis Lab [M/S]
CHEM 2861 Undergraduate Research, Special Topics [M/S]
CHEM 2862-9 Undergraduate Research, Special Topics [M/S]
CHEM 2901-9 Undergraduate Research, Special Topics [M/S]
ENVS&101 Intro to Environmental Science w/ Lab [M/S]
ENVS 174 Intro to Meteorology and the Atmosphere [M/S]
ENVS 310 Environmental Issues [M/S]
GEO 101 Physical Geography [M/S]
GEO 120 Introduction to Atmospheric Science [M/S]
GEO 1201 Introduction to Atmospheric Science Lab [M/S]
GEOL&101 Intro to Physical Geology w/ Lab [M/S]
GEOL 102 Physical Geology II [M/S]
GEOL 102L Physical Geology II Lab [M/S]
GEOL&103 Historical Geology w/ Lab [M/S]
GEOL&110 Environmental Geology w/ Lab [M/S]
MATH 113 Geometry/Trigonometry [M/S]
MATH 121 Structure of Elementary Math [M/S]
NUTR&101 Nutrition [M/S]
PHYS&100 Physics For Non-Science Majors [M/S]
PHYS&101 Physics Lab For Non-Science Majors [M/S]
PHYS&124 General Physics Lab I [M/S]
PHYS&125 General Physics Lab II [M/S]
PHYS&126 General Physics Lab III [M/S]
PHYS&134 General Physics I [M/S]
PHYS&135 General Physics II [M/S]
PHYS&136 General Physics III [M/S]
PHYS&231 Engineering Physics Lab I [M/S]
PHYS&232 Engineering Physics Lab II [M/S]
PHYS&233 Engineering Physics Lab III [M/S]
PHYS&241 Engineering Physics I [M/S]
PHYS&242 Engineering Physics II [M/S]
PHYS&243 Engineering Physics III [M/S]
SCI 110 Natural Hist of the Columbia Basin Region [M/S]
SCI 1101 Natural History of the Col Basin Region Lab [M/S]

Mathematical & Natural Science *OR* Quantitative/Symbolic Reasoning

MATH&107 Math In Society [M/S] [Q/SR]
MATH 122 Informal Geometry/Elementary Teachers [M/S][Q/SR]
MATH 123 Algebra, Probability, Stats Elementary [M/S] [Q/SR]
MATH&141 Precalculus I [M/S] [Q/SR]

MATH&142 Precalculus II [M/S] [Q/SR]
MATH&144 Precalculus I & II [M/S] [Q/SR]
MATH&146 Introduction to Stats [M/S] [Q/SR]
MATH 147 Finite Math [M/S] [Q/SR]
MATH&148 Business Calculus [M/S] [Q/SR]
MATH&151 Calculus I [M/S] [Q/SR]
MATH&152 Calculus II [M/S] [Q/SR]
MATH&153 Calculus III [M/S] [Q/SR]
MATH&171 Math for Elementary Education I [M/S] [Q/SR]
MATH&172 Math for Elementary Education II [M/S] [Q/SR]
MATH&173 Math for Elementary Education III [M/S] [Q/SR]
MATH 243 Linear Algebra [MS/] [Q/SR]
MATH 246 Discrete Structures [M/S] [Q/SR]
MATH&254 Calculus IV [M/S] [Q/SR]
MATH 255 Differential Equations [M/S] [Q/SR]

Quantitative/Symbolic Reasoning

CS 102 Programming Fundamentals [Q/SR]
CS 162 C++2 [Q/SR]
CS 202 Programming Fundamentals 2 [Q/SR]
CS&131 Computer Science I C++ [Q/SR]
PHIL 121 Symbolic Logic [Q/SR]

Social & Behavioral Sciences

ANTH&100 Survey on Anthropology [S/B]
ANTH&204 Archeology [S/B]
ANTH&206 Cultural Anthropology [S/B]
ANTH&234 Religion & Culture [S/B]
ECON 110 Economic Trends, Issues and Policy [S/B]
ECON&201 Micro Economics [S/B]
ECON&202 Macro Economics [S/B]
ECON 291 History of American Economic Development [S/B]
ECON 305 Managerial Economics [S/B]
GEO 150 Cultural Geography [S/B]
HIST 107 Chicano History [S/B]
HIST 108 History of Immigration in the U.S. [S/B]
HIST 110 History of Modern East Asia [S/B]
HIST 111 Colonial Latin America [S/B]
HIST 112 Modern Latin America [S/B]
HIST 113 Mexico Since Independence [S/B]
HIST 115 History of Modern Middle East [S/B]
HIST 116 History of Africa [S/B]
HIST 117 History of India [S/B]
HIST&146 U.S. History I [S/B]
HIST&147 U.S. History II [S/B]
HIST&148 U.S. History III [S/B]
HIST&220 African American History [S/B]
HIST 233 War In History [S/B]
ICS 255 Race and Ethnic Relations [S/B]
POLS&101 Intro to Political Science [S/B]
POLS 104 State and Local Government [S/B]
POLS&201 Intro Political Theory [S/B]
POLS&202 American Government [S/B]
POLS&203 International Relations [S/B]
POLS&204 Comparative Government [S/B]
POLS 205 American Political Thought [S/B]
PSYC&100 General Psychology [S/B]
PSYC 103 Applied Psychology [S/B]
PSYC&200 Lifespan Psychology [S/B]
PSYC 201 Social Psychology [S/B]
PSYC 205 Psychology of Adjustment [S/B]
PSYC&220 Abnormal Psychology [S/B]
SOC&101 Intro to Sociology [S/B]
SOC 110 Gender, Media, and Popular Culture [S/B]
SOC 150 Marriage-Family [S/B]
SOC&201 Social Problems [S/B]
SOC 269 Sociology of World Cinema [S/B]
SSCI 290 Social Research Methods [S/B]
SSCI 2901 Social Research Methods Lab [S/B]

Appendix C: Course Descriptions and Outcomes

PROJ 100 Introduction to Project Management 5 credits

PROJ 100 is an introduction to foundational knowledge and concepts for the project management profession. The course introduces key project definitions, project phases, and the project management knowledge areas. The course also introduces the student to project management activities such as scope, cost, and schedule management, project leadership skills and the project team development model. The role of ethics in project management is also discussed.

COURSE GOAL & OUTCOMES

Introduction to Project Management is intended to develop familiarity with project management processes, terminology, and concepts through the following outcomes:

1. Describe basic scope definition and Work Breakdown Structure development processes. (SLO 1, 3, & 6)
2. Describe basic elements of developing resources and assigning them to the project schedule. (SLO 1, 3, & 6)
3. Explain basic project risk management elements. (SLO 1 & 6)
4. Describe basic project leadership skills and the project team development model. (SLO 1, 3, & 6)
5. Explain basic project control processes including monitoring progress and using earned value management. (SLO 1, 3, & 6)
6. Locate and describe key project management framework elements including definitions, project life cycle, stakeholder role, and various organizational cultures and structures of a project in the PMBOK® Guide. (SLO 1 & 6)
7. Locate and describe the five project management Process Groups in the PMBOK® Guide and their key their relationships with each other and the project life cycle in the PMBOK® Guide. (SLO 1, 3, & 6)
8. Communicate a basic understanding of the PMBOK® Guide ten project management Knowledge Areas, their processes and activities, and how/why they contribute to successful project management. (SLO 1, 3, & 6)
9. Describe the four values (i.e., responsibility, respect, fairness, and honesty) of PMI® Code of Ethics and Professional Conduct and discuss the importance of ethics in successful project management. (SLO 1, 3, & 6)

PROJ 110 Project Planning 5 credits

PROJ 110 examines the important planning phase of a project which includes preparing the project management plan, defining the project scope and work breakdown structure; defining the activities and schedule; and estimating the costs and defining the budget. It also addresses planning quality, human resources, communication, risk, and procurement elements of a project. This course introduces schedule concepts and would typically be taken in parallel with scheduling software course PROJ 130 or PROJ 140.

COURSE GOAL & OUTCOMES

Project Planning develops familiarity with important project planning processes, terminology, and concepts through the following outcomes:

1. Describe the Project Management Plan and its role in project integration. (SLO 1, 3, & 6)
2. Explain how to define the project scope including collecting requirements and defining project priorities. (SLO 1, 3, & 6)
3. Describe how to develop the work breakdown structure and integrate it with the project organization. (SLO 1, 2, 3, & 6)
4. Describe the network types and the steps for developing the project network schedule including activity definition, sequencing, as well as estimating resources and durations. (SLO 1, 3, & 6)
5. Describe the project cost estimating approaches and how to determine the project budget. (SLO 1, 3, & 6)
6. Explain project quality management planning including quality roles, objectives, assurance, control, and tools. (SLO 1, 3, & 6)
7. Describe basic project human resource planning including acquiring and developing the team, managing/leading the team, and the responsibility assignment matrix. (SLO 1, 3, & 6)
8. Explain basic communication planning including project stakeholder analysis, information needs and sources, dissemination modes/timing, and responsibilities. (SLO 1, 3, & 6)
9. Describe basic project risk management planning including risk identification, risk analysis, and risk response development. (SLO 1, 3, & 6)
10. Explain basic procurement planning for the project including supply chain considerations, make/buy decisions, and contract types. (SLO 1, 3, & 6)

PROJ 120 Project Execution and Control 5 credits

Project Execution and Control presents the project execution phase and corresponding monitoring and control activities. It also addresses project team acquisition and development; performing quality assurance/control activities; distributing information; managing stakeholder expectations; and procurement activities.

COURSE GOAL & OUTCOMES

Project Execution and Control is intended to develop familiarity with project execution phase and monitoring/control processes, terminology, concepts, and activities through the following outcomes:

1. Explain the activities that encompass directing and managing the project execution phase. (SLO 1, 3, & 6)
2. Describe the basic monitoring and controlling activities including change control. (SLO 1, 2, 3, & 6)
3. Explain basic project team acquisition, development, and management including performance appraisal and conflict resolution. (SLO 1, 3, & 6)
4. Describe quality assurance activities and techniques including use of metrics, checklists, and improvement plans. (SLO 1, 2, 3, & 6)
5. Explain how and why quality inspection and variance analysis activities, quality control tools/techniques are used. (SLO 1, 2, 3, & 6)

6. Provide basic explanation of how and why project information is communicated and stakeholder expectations are managed. (SLO 1, 3, & 6)
7. Describe basic procurement conduct and administration activities during project execution. (SLO 1, 3, & 6)
8. Explain project risk monitoring and controlling activities and techniques. (SLO 1, 3, & 6)

PROJ 130 Intro to Microsoft® Project 5 credits

Intro to Microsoft® Project provides hands-on skills using Microsoft® Project 2010 software for developing and maintaining the project schedule. The course uses Project 2010 to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. The course also provides a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines.

COURSE GOAL & OUTCOMES

Intro to Microsoft® Project develops skills using Microsoft® Project 2010 software for creating and using the project schedule through the following outcomes:

1. Effectively navigate within Project 2010. (SLO 1, 2, 4, & 6)
2. Create a Milestone Schedule. (SLO 1, 2, 4, & 6)
3. Create a Work Breakdown Structure (WBS) and understand the importance of the WBS. (SLO 1, 2, 4, & 6)
4. Identify and establish task relationships. (SLO 1, 2, 4, & 6)
5. Define and assign resources and make work package estimates. (SLO 1, 2, 4, & 6)
6. Create an initial project schedule and understand critical path. (SLO 1, 2, 4, & 6)
7. Setup a project calendar, project start date, and select the scheduling method (manual vs. auto-schedule). (SLO 1, 2, 4, & 6)
8. Create a basic resource leveled schedule. (SLO 1, 2, 4, & 6)
9. Capture actual performance data. (SLO 1, 2, 4, & 6)
10. Create various outputs and reports. (SLO 1, 2, 4, & 6)
11. Set and use project baselines to measure progress. (SLO 1, 2, 4, & 6)
12. Update the project schedule. (SLO 1, 2, 4, & 6)
13. Close the Project. (SLO 1, 2, 4, & 6)

PROJ 140 Introduction to Primavera 5 credits

Introduction to Primavera provides hands-on skills using Primavera software for developing and maintaining the project schedule. The course uses Primavera to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. The course also provides a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines.

COURSE GOAL & OUTCOMES

Introduction to Primavera develops skills using Primavera software for creating and using the project schedule through the following outcomes:

1. Effectively navigate within Primavera. (SLO 1, 2, 4, & 6)
2. Create a Milestone Schedule. (SLO 1, 2, 4, & 6)
3. Create a Work Breakdown Structure (WBS) and understand the importance of the WBS. (SLO 1, 2, 4, & 6)
4. Identify and establish task relationships. (SLO 1, 2, 4, & 6)
5. Define and assign resources and make work package estimates. (SLO 1, 2, 4, & 6)
6. Create an initial project schedule and understand critical path. (SLO 1, 2, 4, & 6)
7. Setup a project calendar, project start date, and select the scheduling method (manual vs. auto-schedule). (SLO 1, 2, 4, & 6)
8. Create a basic resource leveled schedule. (SLO 1, 2, 4, & 6)
9. Capture actual performance data. (SLO 1, 2, 4, & 6)
10. Create various outputs and reports. (SLO 1, 2, 4, & 6)
11. Set and use project baselines to measure progress. (SLO 1, 2, 4, & 6)
12. Update the project schedule. (SLO 1, 2, 4, & 6)
13. Close the Project. (SLO 1, 2, 4, & 6)

PROJ 211 Project Procurement 5 credits

Project Procurement provides basic understanding of project procurement management including key processes, roles/responsibilities, and types of contracts. The course will address the various roles people play in the procurement process and how procurement management plays a key part in achieving successful projects.

COURSE GOAL & OUTCOMES

Project Procurement examines procurement concepts and practices beyond those covered in PROJ 110. The class will address solicitation, source selection, and basic contract administration fundamentals through the following outcomes: (Note: Advanced procurement topics are addressed in PROJ 310 *Project Contracts & Legal Issues*.)

1. Explain the project procurement management processes and activities to plan, conduct, administer, and close procurements. (SLO 1, 3, & 6)
2. Evaluate the role of procurement in project management and its importance for ensuring project success. (SLO 1, 3, & 6)
3. Analyze procurement concepts and their application to projects, including solicitation, source selection, and contract administration fundamentals. (SLO 1, 2, 3, & 6)
4. Evaluate various procurement contract types and when each is appropriate. (SLO 1, 3, & 6)
5. Analyze the various procurement roles and responsibilities in the project team. (SLO 1, 3, & 6)
6. Evaluate procurement lessons learned and best practices for projects. (SLO 1, 3, & 6)

PROJ 221 Project Integration and Communication 5 credits

Project Integration & Communication provides further understanding of how project integration and communication management contribute to sound project management. The course will address tools, skills, and techniques beyond those covered in PROJ 100 and PROJ 120. The course addresses how integration, led by the project manager, and communications contribute to effective project management.

COURSE GOAL & OUTCOMES

Project Integration & Communication develops project integration and communication concepts through the following outcomes:

1. Analyze the role the Project Management Plan plays in project integration and communication. (SLO 1- 6)
2. Evaluate processes, tools, and skills necessary to direct and perform the work defined in the Project Management Plan, including expert judgment, document updates, configuration control, and information management systems/tools, and effective communication within the project team. (SLO 1-6)
3. Analyze the interrelationships between integration, execution, and monitoring/control activities. (SLO 1- 6)
4. Evaluate how communicating relevant information contributes to successful project execution, control, and closure, and stakeholder satisfaction. (SLO 1- 6)
5. Analyze how change control is performed and why it is essential for achieving project success. (SLO 1- 6)

PROJ 231 Project Risk Management 5 credits

Project Risk Management provides additional knowledge and skills for identifying project risks, analyzing risks, and risk responses. The course addresses both quantitative and qualitative analysis, risk monitoring and control techniques, risk probability, and risk impacts.

COURSE GOAL & OUTCOMES:

Project Risk Management develops risk management concepts and application through the following outcomes:

1. Evaluate sources of scope, schedule, and resource risks. (SLO 1, 3, 5, & 6)
2. Compare risk gathering techniques (e.g., brainstorming, Delphi technique, brainstorming, checklist analysis. (SLO 1, 3, & 6)
3. Explain risk capture using a risk register and why documentation is necessary. (SLO 1, 3, & 6)
4. Evaluate use of qualitative risk analysis and techniques (e.g., cause-and-effect diagram). (SLO 1, 2, 3, & 6)
5. Evaluate use of quantitative risk analysis and techniques (e.g., decision tree, fault tree analysis, modeling and simulation techniques). (SLO 1, 2, 3, 4, & 6)

6. Compare risk response planning strategies (i.e., avoid, transfer, mitigate, accept) and when to use each. (SLO 1, 3, 5, & 6)
7. Evaluate opportunity (positive risk) planning strategies (i.e., exploit, share, enhance, accept) and when to use each. (SLO 1, 3, 5, & 6)
8. Evaluate risk monitoring and control techniques (e.g., reassessment, audit, trend analysis) and their appropriate use. (SLO 1, 3, & 6)

PROJ 241 Project Management Capstone 5 credits

Project Management Capstone integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. The course includes evaluation of project decisions to identify improvement opportunities.

COURSE GOAL & OUTCOMES:

Project Management Capstone integrates the project management knowledge and skills in earlier courses through the following outcomes:

1. Apply key concepts and practices from the PMBOK® Guide five project phases and ten knowledge areas through application on a simulated project(s). (SLO 1, 2, 3, & 6)
2. Construct and use a project schedule using either Microsoft® Project 2010 or Primavera software to plan and monitor progress on a simulated project(s). (SLO 1, 2, 3, 4, & 6)
3. Use risk management concepts and practices in making decisions on a simulated project(s). (SLO 1, 2, 3, & 6)
4. Manage and/or participate in a project team on a simulated project(s). (SLO 1, 3, & 6)
5. Analyze simulated project(s) performance/results to determine and explain improvement opportunities, and communicate simulated project and personal lessons learned. (SLO 1, 3, & 6)
6. Experience team behavior, analyze team and team-member behavior and consequences, and communicate observations to other students. (SLO 1, 2, 3, 5, & 6)

PROJ 310 Project Contracts and Legal Issues 5 credits

Project Contracts and Legal Issues develops concepts beyond PROJ 211 dealing specifically with contracts including advanced contract administration topics such as monitoring/ change control and claims. Also, addresses project management legal issues. **PREREQUISITE OR ASSET/COMPASS SCORE (AS APPROPRIATE):** PROJ 120, PROJ 211

COURSE GOAL & OUTCOMES:

Project Contracts and Legal Issues provides advanced project procurement issues of contracts and legal issues through the following outcomes:

1. Differentiate commercial vs. government terminology, jargon, and contracting processes. (SLO: 1 & 6)

2. Analyze statements of work (SOW) components and examples to identify contract success criteria and prepare an SOW reflecting these criteria. (SLO: 1, 3, 5, & 6)
3. Apply contract administration principles/techniques (e.g., monitoring, change control, monitoring, claims) to sample contracts or contract situations. (SLO: 1, 2, 3, 5, & 6)
4. Analyze common project-related contract legal issues and how to avoid adverse impacts to the project. (SLO: 1, 2, 3, 5, & 6)
5. As a small group, critique selected case studies to determine impact and risks to a project. (SLO: 1, 2, 3, & 6)
6. As a small group, demonstrate learned negotiation techniques and skills. (SLO: 1, 2, 3, 4, 5, & 6)
7. Critique (SLO: 1, 2, 3, 4, 5, & 6)

PROJ 320 Project Monitoring, Control & Earned Value 5 credits

Project Monitoring, Control & Earned Value develops monitoring and control issues beyond PROJ 120 including earned value management concepts and skills. **PREREQUISITE OR ASSET/COMPASS SCORE (AS APPROPRIATE):** PROJ 120

COURSE GOAL & OUTCOMES:

Project Monitoring, Control & Earned Value develops advanced monitoring, controlling, and earned value skills and knowledge through the following outcomes:

9. Apply the earned value body of knowledge, including ANSI-EIA-378 *Earned Value Management Standards*, for monitoring and controlling a project. (SLO 1, 2, 3, 4, & 6)
10. Using earned value principles, create a Work Breakdown Structure (WBS) and WBS dictionary. (SLO 1, 2, 3, 4, & 6)
11. Develop and use the Control Account Plans (CAP) and the Performance Measurement Baseline. (SLO 1, 2, 3, 4, & 6)
12. Apply earned value measurement for project CAPs (e.g., labor, contracts, and other procurements). (SLO 1, 2, 3, 4, & 6)
13. Analyze project performance against the earned value baseline and prepare variance analyses. (SLO 1, 2, 3, 4, 5, & 6)
14. Present variance analyses or forecasts to the class and assess other student's variance analyses or forecasts. (SLO 1, 2, 3, 4, 5, & 6)
15. Forecast final cost and schedule results using cost and schedule variances and indexes. (SLO 1, 2, 3, 4, & 6)
16. Compare use of earned value metrics for a portfolio of projects. (SLO 1, 2, 3, 4, & 6)

PROJ 330 Human Resource Management & Communication Skills 5 credits

Human Resource Management & Communication Skills addresses project team development, leadership, and dynamics, as well as dealing with conflict. Specifically needed communication skills will be identified and developed through appropriate activities (e.g., presentations, role play). **PREREQUISITE OR ASSET/COMPASS SCORE (AS APPROPRIATE):** PROJ 120, PROJ 221

COURSE GOAL & OUTCOMES:

Human Resource Management & Communication Skills develops people management and communication skills through the following outcomes:

7. Describe and demonstrate the appropriate team management techniques for meetings, discussions, and decisions. (SLO 1, 3, & 6)
8. Describe the project-related roles and responsibilities and how to document them. (SLO 1, 3, & 6)
9. Evaluate team dynamics, various team development stages, and team success principles. (SLO 1, 3, & 6)
10. Analyze various data collection and problem solving techniques, and improvement strategies for use by the Project Team. (SLO 1, 2, 3, 4, & 6)
11. Using successful meeting conduct actions and techniques, conduct success-oriented mock meetings. (SLO 1, 3, & 6)
12. Demonstrate how to resolve common conflicts between people on a project. (SLO 1, 3, 4, 5, & 6)
13. Using various communication techniques, compose communications for appropriate project stages or circumstances. (SLO 1, 3, 4, 5, & 6)

PROJ 411 Advanced Microsoft® Project 5 credits

Advanced Microsoft® Project develops advanced schedule concepts and practices using Microsoft® Project 2010 software, beyond those learned in PROJ 130, *Introduction to Microsoft® Project*, including topics such as resource leveling, critical path management, baselining, and progress reporting. The class will utilize scenarios to be addressed using the software. **PREREQUISITE OR ASSET/COMPASS SCORE (AS APPROPRIATE):** PROJ 120, PROJ 130, or instructor permission

COURSE GOAL & OUTCOMES:

Advanced Microsoft® Project develops advanced skills for using Microsoft® Project 2010 software through the following outcomes:

1. Create a special project calendar. (SLO 1, 2, 4, & 6)
2. Analyze assigned resources to optimize (level) allocation. (SLO 1, 2, 4, & 6)
3. Apply changes to the schedule including the Work Breakdown Structure (WBS). (SLO 1, 2, 4, & 6)
4. Evaluate project performance. (SLO 1, 2, 4, & 6)
5. Create a multiple project schedule. (SLO 1, 2, 4, & 6)
6. Import and export data. (SLO 1, 2, 4, & 6)
7. Linking and embedding project data. (SLO 1, 2, 4, & 6)
8. For various scenarios, generate schedules, reports and analyses for use by the Project Team. (SLO 1, 2, 3, 4, & 6)

PROJ 421 Advanced Primavera 5 credits

Advanced Primavera develops advanced schedule concepts and practices using Primavera software, beyond those learned in PROJ 140, *Introduction to Primavera,* including topics such as resource

leveling, critical path management, baselining, and progress reporting. The class will utilize scenarios to be addressed using the software.

COURSE GOAL & OUTCOMES:

Advanced Primavera develops advanced skills for using Primavera software through the following outcomes:

1. Create a special project calendar. (SLO 1, 2, 4, & 6)
2. Analyze assigned resources to optimize (level) allocation. (SLO 1, 2, 4, & 6)
3. Apply changes to the schedule including the Work Breakdown Structure (WBS). (SLO 1, 2, 4, & 6)
4. Evaluate project performance. (SLO 1, 2, 4, & 6)
5. Create a multiple project schedule. (SLO 1, 2, 4, & 6)
6. Import and export data. (SLO 1, 2, 4, & 6)
7. Linking and embedding project data. (SLO 1, 2, 4, & 6)
8. For various scenarios, generate schedules, reports and analyses for use by the Project Team. (SLO 1, 2, 3, 4, & 6)

PROJ 480 Advanced Project Management Capstone 5 credits

Advanced Project Management Capstone integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. The course includes evaluation of project decisions to identify improvement opportunities. **PREREQUISITE OR ASSET/COMPASS SCORE (AS APPROPRIATE):** PROJ 310, PROJ 320, PROJ 330, and PROJ 411 or PROJ 421

COURSE GOAL & OUTCOMES:

Advanced Project Management Capstone integrates the project management knowledge and skills in earlier courses through the following outcomes:

1. Apply key concepts and practices from the PMBOK® Guide five project phase nine knowledge areas through application on a simulated project(s). (SLO 1, 2, 3, & 6)
2. Plan and analyze progress on a simulated project(s) using either Microsoft® Project 2010 or Primavera software. (SLO 1, 2, 3, 4, & 6)
3. Apply risk management concepts and practices in making decisions on a simulated project(s). (SLO 1, 2, 3, & 6)
4. Perform project team leader role on a simulated project(s). (SLO 1, 3, & 6)
5. Perform project team member role on a simulated project(s). (SLO 1, 3, & 6)
6. Analyze simulated project(s) performance/results to determine and explain improvement opportunities, and communicate simulated project and personal lessons learned. (SLO 1, 3, & 6)
7. Evaluate team behavior, analyze team and team-member behavior and consequences, and communicate observations to other students. (SLO 1, 2, 3, 5, & 6)
8. Using successful meeting conduct actions and techniques, conduct success-oriented mock meetings. (SLO 1, 3, 4, 5, & 6)
9. Using various communication techniques, compose communications for appropriate simulated project scenarios. (SLO 1, 3, 4, 5, & 6)

Appendix D: Faculty Resumes in an Abbreviated Format

Brad Edwards, Adjunct Faculty

Education

- MS - Contract and Procurement Management, St Mary's College, Moraga, CA
- BS – Marketing, California State University - Chico

Program Related Experience

- Present Employment: Director of Contracts, Mission Support Alliance (MSA), Richland, WA
- Director of Contracts: Lockheed Martin, IS&GS – Civil
- Senior Contract Manager: Lockheed Martin Mission Services, IS&GS
- Senior Manager, Information Technologies Group, Lockheed Martin Shared Services, Strategic Sourcing
- Senior Subcontract Manager, Litigation Support, Lockheed Martin Information and Technology Services
- Adjunct Instructor – University of Northern Alabama
- National Management Association – National Director

Jimmie Flores, PhD, PMP, SSBB, SPHR, GPHR, ITIL, Adjunct Faculty

Education

- Ph.D. in Human and Organizational Development
- Doctor of Management (DM) in Information Systems and Technology
- M.S. in Management
- M.S. in Non-Profit Management
- M.A. in Human and Organizational Systems
- M. Ed. In Curriculum, Instruction, and Assessment
- M.S. Educational Technology
- M.S. Computer Information Technology
- M.B.A Areas of Concentration: Finance, Marketing and Management
- B.B.A Major: Corporate Financial Management

Professional Certifications

- Project Management Professional (PMP)
- Senior Professional in Human Resources (SPHR)
- Global Professional in Human Resources (GPHR)
- Six Sigma Black Belt (SSBB)
- Information Technology Infrastructure Library (ITIL)

Higher Education Experience

- *College of the Rockies,* Currently teach the following online graduate courses: Organizational Theories & Systems, and Leading Organizational Change

- *Axia College*, Currently teach the following online undergraduate courses: Intro to LAN Technologies, Intro to WAN Technologies, Intro to IT Security
- *San Antonio College,* Adjunct Instructor
- *Houston Community College*, Adjunct Instructor

Program Related Experience

- Present Employment: Flores Consulting Group, Project Management Consultant

Rodney Gadd PMP, Full-Time Faculty

Education

- M.S. Project Management, City University of Seattle
- B.S. Chemical Engineering, Washington State University

Program Related Experience

- Present Employment: CBC Project Management Instructor
- Lead Fluor Hanford Project Management Program Office
- 30 years' experience as a project manager at Hanford

Shelly Grohs CHMM PMP, Adjunct Faculty

Education

- M.S. Technology Management, University of Maryland University College
- B.S. General Studies, City University
- A.A. General Studies, Shawnee State University

Program Related Experience

- Present Employment: Project Manager, Pacific Northwest National Laboratory
- Associate Operations Manager, National Security Directorate
- Manager, Department of Energy Oversight and Assessment

Mike Kennedy PE PMP, Adjunct Faculty

Education

- Doctor of Engineering, Nuclear Engineering, Texas A&M University
- M.S. Nuclear Engineering, Ohio State University
- B.S. Mechanical/Nuclear Engineering, Ohio State University
- J.D. Law, University of Georgia
- B.A. English, University of Massachusetts

Program Related Experience

- Present Employment: Chief Systems Engineer; Project Manager, Pacific Northwest National Laboratory, DEPARTMENT OF ENERGY FFRDC (WA)
- Chief Systems Engineer; Project Manager, Domestic Nuclear Detection Office, DHS (DC)

Curtis Lawrence, Adjunct Faculty

Education

- Pursuing Doctorate in Business Administration, Walden University
- M.B.A Concentration: Strategic Management, State University of New York
- A.A.S. Mechanical Technology, Iowa Western Community College

Program Related Experience

- Present Employment: Senior Technical Advisor, Central Engineering Group, WA River Protection Solutions
- Engineering Technical Manager, Central Design Authority and Standards Group, WA River Protection Solutions

Kathleen Leonard PMP, Adjunct Faculty

Education

- M.S. Environmental Science, Washington State University
- B.A. Environmental Geology, Central Washington University

Program Related Experience

- Present Employment: Project Manager, AREVA Federal Services
- Technical Expert, Portage Inc./Navarro Research and Engineering
- Project Manager, Bechtel BWXT/Northwind
- Site Project Manager/Validation Manager/Audit Manager, Bechtel BWXT/Northwind

Robert Miles PE PMP, Adjunct Faculty

Education

- B.S. Civil Engineering, Colorado State University

Program Related Experience

- Present Employment: Project/Contract/Design Quality Manager, Northwind, Inc.
- Project Manager, Fluor Federal Services
- Contract Officer, Fluor Federal Services
- Project Engineer, Fluor Hanford

James Payne, Adjunct Faculty

Education

- B.A. Major: Economics, University of Washington
- A.A Major: Business Prep, Columbia Basin College

Program Related Experience

- Present Employment: Project Control Specialist, US Department of Energy
- Project Manager/Sr. Project Control Specialist Project Assistance Corporation

Stephan Penn PMP EVP, Adjunct Faculty

Education

- D.M. Management, University of Maryland University College
- M.B.A. Business Administration, Frostburg State University
- B.A. Russian, University of Texas
- B.A. Mathematics, University of Texas

Program Related Experience

- Present Employment: Data Mining Specialist, UMUC, Adelphi
- Subject Matter Expert, Portfolio Management Consulting
- Senior Project Manager, INDUS
- PMO Director, Quality Software Services, Inc.
- Project Manager, Lockheed Martin

Joshua Ramirez PMP, MSM-PM, Adjunct Faculty

Education

- M.S. Management, Colorado Technical University
- B.A. Business Administration Major: Accounting/Finance, American Intercontinental University
- B.A. Business Administration Major: Management, American Intercontinental University

Program Related Experience

- Present Employment: Project Controls Consultant/Proprietor, Nines Program
- Project Controls Engineer: Perma-Fix Environmental Services

Ann Shattuck PE PMP, Adjunct Faculty

Education

- B.S. Mechanical Engineering, Washington State University

Program Related Experience

- Present Employment: Engineering Manager, Vista Engineering LLC
- Project Manager, Fluor Government Group
- Project Engineer, Boise Cascade Corporation

Robert Steele PMP, Adjunct Faculty

Education

- Pursuing Doctorate Industrial/System and Engineering Management, Texas Tech University
- M.B.A Indiana Wesleyan University
- B.S. Electrical Engineering, Washington State University

Program Related Experience

- Present Employment: Project Manager, Battelle Memorial Institute
- Lead Project Engineer, Battelle Memorial Institute
- Shift Operations Director, CH2M-Hill
- Engineering Discipline Lead – Electrical, CH2M-Hill
- Supervisor, Electrical Engineering Design, Nebraska Public Power District

Russell Swannack PMP

Education

- M.T.M Management Information Systems, Washington State University
- B.S. Computer Science, Washington State University
- A.A.S. Computer Science, Columbia Basin College

Program Related Experience

- Present Employment: Senior Software Quality Engineer, Pacific Northwest National Laboratory
- Principle Research Scientist, Battelle
- Information Technology Project Manager, Battelle

Higher Education Experience

- Adjunct Professor – Electrical engineering and Computer Science Department, Washington State University

Shawn Woodford PMP, Adjunct Faculty

Education

- M.B.A Concentration: Management, Washington State University

Program Related Experience

- Present Employment: Project Manager, Navarro Research and Engineering
- Cost Estimator/Risk Analyst, Project Time & Cost
- Project Controls Specialist, Battelle
- Billing Analyst, Fluor Government Group

Ken Zimmerman, Adjunct Faculty

Education

- MBA – Currently University of Phoenix, Phoenix
- B. S. Business Management, University of Phoenix
- Project Management Studies, Seattle Pacific University
- Advanced Programming Languages, Boeing Computer Services
- AA Computer Science, Tacoma Community College
- AA Graphic Arts, University of Duquesne

Program Related Experience

- Present Employment: Primavera P6 Administrator, Lockheed Martin Services
- System Programmer: Telect, Inc.

Appendix E: Content Expert Evaluations

Columbia Basin College
Program Proposal – Forms C and D
Bachelor of Applied Science: Project Management

Comments:

p.4

"Because of the documented need for project management professionals in our region, CBC obtained federal grant and established public and community partnerships to support a local Program." – Does program need to be capitalized?

p. 7 – Program Learning outcomes

- There is a difference in program and project management according to PMI. In your PLO #1, #2, and #3, are you meaning project management vs. program management?
- I see you specifically want to assess each process phase in project management, why is #3 called out for "activities" but #1 and #2 are not?
- Where does initiation and closing fall under?
- Is #8 too many pieces to assess?
- Most of your program learning outcomes consist of analysis and synthesis (bloom's taxonomy) of the learning outcomes, with the courses being evaluated from level 001 to 004, how will you be able to assess the learning progression of the student's throughout your program?
- Do you have a link (matrix) from your course outcomes to your program outcomes to your student learning outcomes and possibility to your university criteria evaluation? In other words, how does your assessment model correlate with each other?

p.10 – CBC Certificate and 2-year Degree Project Management Program Overview

- "An overview of the certificate, the two-year degree, and the proposed BAS degree (see table 3) are available in the grant document in Appendix D" – I believe your Appendix D consist of instructor resumes.

- PMBOK is now in its 5th edition. The 5th edition has 10 knowledge areas. How will you make your certificate and program scalable to meet the changes and topics to include more than just the knowledge areas? What about agile?

- "The certificate and both degrees are based on the Project Management Body of Knowledge Guide (PMBOK® Guide) and are developed around the guide's five process groups and nine knowledge areas as identified by Project Management International (PMI). PMI is the dominant

Project Management professional organization and has developed certificates such as Project Management Professional (PMP®) and Certified Associate in Project Management® (CAPM®). The PMI knowledge and process areas are identified in Figure 4."

- Figure 4 should include the updated knowledge areas from the PMBOK v5.

p.13 1.5 Course work needed at junior and senior levels of the BAS

- "The all required courses are listed in Table 3." – Sounds awkward, are there words missing?

p.18 Table 6: Core Project Management Faculty

- It would help to see who is PMP certified as part of their credentials.

p.31 – Criteria 6. Program Specific Accreditation

- "Both the AAS and BAS degrees in Project Management are based on the Project Management Body of Knowledge Guide (PMBOK® Guide) and are developed around the guide's five process groups and nine knowledge areas as identified by Project Management Institute (PMI)." – Should be 10.

- "After 23 hours of project management instruction, the student can apply to take the CAPM® exam at their own expense. After students graduate and have been working as a project manager for a certain number of years, they will be eligible to sit for the Project Management Professional (PMP®) exam." – Here is the link that shows the different requriements in order to take the exam. It requires educational hours as well as real world project experience hours (PMP requires that you lead) - http://www.pmi.org/Certification/Which-PMI-Certification-is-Right-for-You.aspx.

- "When PMI accreditation has been granted, students will receive the equivalent of 1500 project management hours towards the PMI certification requirements. With the equivalent of 1500 hours of project management work experience graduates will be able to qualify for certifications much sooner following graduation." – Actually, once your institution is becomes GAC (Globally Accredited Center) accredited through PMI, students are able to apply their degree or 1500 hours toward their project experience as part of the 4500 total hours in leading and directing projects in order to apply for their PMP. Your numbers are a little off - http://www.pmi.org/Certification/Project-Management-Professional-PMP.aspx.

- If you are interested in getting your program accredited through PMI, have you thought about including GAC's program learning outcomes into your program/courses in the beginning?

General Overall Comments:

- Change PMBOK 4th edition to PMBOK 5th edition with 10 knowledge area. I noticed some nine knowledge areas throughout the course outcomes that might need to be changed.
- Matrix the relationship between the program outcomes, student learning outcomes, course outcomes, and /or any university outcomes.
- Perhaps show how you access progression of learning by the student.
- Include GAC PMI (Accreditation) outcomes as part of your program.
- Include how you would involve students into your active local PMI chapters.