Department of Information Systems and Technology

Volgenau School of Engineering

AIT 665: BO1 Summer 2019

Managing IT Programs in the Federal Sector

**Syllabus**

Syllabus is available to registered students at Blackboard Learning Systems: (http://mymason.gmu.edu/).

**Faculty**

Instructor: **Billy “Skip” Powers, PhD; bpowers7@gmu.edu; (703) 919-1403.**

**Office Hours:** Virtual. To schedule a private appointment by phone, email me your preferred mode, date and time (include course number on all communications). Email **bpowers7@gmu.edu** or call/text (703) 919-1403. Please identify yourself by name/course number if using SMS/IM option.

**Course Description**

*Prerequisite:* None.

Introduces students to the fundamentals and the complexity of acquisition and program management in the Federal Sector, including the influence of Congress, elements of the Executive Branch, impact of lobbyists, the media, and others. Students will be reintroduced to basic concepts of program management, systems engineering, earned-value management, budgeting, enterprise governance, modeling and simulation and other essential elements of system acquisition as they apply to the Federal Sector. Students will become familiar with past failures and successes through case studies.

**Delivery Method**

This course will be delivered online using an asynchronous format. Because online courses do not have a fixed meeting day, our week will start on **Mondays** and finish on **Sundays**. Each week you will complete readings, view multimedia resources, answer questions regarding the readings, and have the opportunity to engage in discussions that will provide you the opportunity to verify your understanding of course content in preparation for the course's three quizzes. Please refer to the Syllabus posted on Blackboard for any changes in activities or assignments.

**Expectations:**

- **Course Week:** Our course week starts on **Monday** and finishes on **Sunday. Log-in Frequency:** Students must actively check the course Blackboard site and their Mason email for communications from the Instructor; at a minimum this should be 2 times per week.

- **Participation:** Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials and completing course activities and assignments. Participating in course discussions is optional but strongly recommended to assist you in testing and reinforce learning of the material.
• **Technical Competence**: Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance and manage the resolution if they experience technology challenges with the course.

• **Technical Issues**: Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted.

• **Schedule**: Remember, this course is **not** self-paced. There are **specific deadlines** and **due dates** listed in the Syllabus section to which you are expected to adhere. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments.

• **Advising**: If you wish to schedule a one-on-one meeting to discuss course requirements, content or other course-related issues and, you are unable to come to the Mason campus, we may meet via telephone or web conference. To schedule a meeting – virtual or in-person please contact me at bpowers7@gmu.edu

• **Netiquette**: Our goal is to be collaborative, not combative. Experience shows that even an innocent remark in the online environment can be misconstrued. I suggest that you always re-read your responses carefully before you post them to encourage others from taking them as personal attacks. Be positive in your approach to others and diplomatic with your words. I will do the same. Remember, you are not competing with each other but sharing information and learning from one another as well as from me.

**Learning Objectives**
Specific learning objectives include:

1. **Articulate** the form, **practice and limitations** of the legal and managerial tools at the government’s disposal.
2. **Explain** the process of **initiating** a Federal Sector program.
3. **Navigate** Federal Sector **oversight and public scrutiny** from program vision through implementation and **sustainment**.

**Student Roles and Responsibilities**
- Students in this class are considered to be adults completing the Master of Science education; they are expected to have read and are accountable for all details of this syllabus.
- This course is an asynchronous format.
- You are reminded of the [Mason Honor Code](mailto:bpowers7@gmu.edu), referenced herein under Mason Policies, Paragraph a. Each student is thereby bound to deliver their own work in accordance with guidance provided by the Instructor.

**Questions**
All personal questions should be resolved via Mason Email to the Instructor (bpowers7@gmu.edu) or, by appointment with the Instructor.

**Technical Requirements**
To participate in this course, students must have the following resources:

- Personal computer with at least 1.0 GHz speed, 250 Mb RAM;
- Microphone/speakers or USB headset compatible with the computer used for the course
• Video camera compatible with the computer used for the course;
• High-speed Internet access with a standard, up-to-date browser, either Internet Explorer or Mozilla Firefox. Opera and Safari are not compatible with Blackboard;
• Consistent, reliable access to Mason email and Blackboard, the official methods of communication for this course, and;
• Java software plug-in for PCs and Macs respectively, is available for free downloading.

For technical questions regarding Blackboard, see Courses Support for Students and Blackboard Tutorials. If you still have questions, email courses@gmu.edu for assistance. For technical questions regarding computer networking, see ITU Support for Students. If you still have questions, email support@gmu.edu or call (703) 993-8870.

Assignments
All work should be the product of your best thinking. Proper spelling, syntax, sentence structure and vocabulary are the marks of an educated person; they should be evident in your work. “IM-speak” is inappropriate for this class. Digital deliverable of each assignment must be posted to the Blackboard Assignments Folder by 5PM Sunday in the week in which assignment is posted, unless otherwise directed by me. All assignments must contain in the Header: Student’s full proper name and the Assignment Title. All reading assignments are due the week the assignment is posted, unless otherwise directed.

Readings

Introduction to Defense Acquisition Management: Defense Acquisition University Press (“DAU”)

Cases:
1. Certifying AMRAAM (Blackboard Contents folder)
2. John Lehman and the Press (Blackboard Contents folder)
3. The Boeing Tanker Deal (Part A) and (Part B) [available for purchase by each student at (https://cb.hbsp.harvard.edu/cbmp/access/27892050)].
4. The Press and the Neutron Bomb (Blackboard Contents folder)
5. Theater Battle Management Systems Engineering Case Study, AFIT/SY (Blackboard Contents folder)

Questions
All questions should be asked and resolved via Mason email bpowers7@gmu.edu or by appointment.

Assignments
Written work should be the product of your best critical thinking. Proper spelling, syntax, sentence structure and vocabulary are the marks of an educated scholar; they should be evident in your work. “IM-speak” is inappropriate for this class. Assignments are due as published; late work is not accepted. Collateral materials, such as templates and forms that support assignments and other course content, are available in Course Contents folder in Blackboard.
Grades
Grades will be awarded in accordance with the Mason Grading System for graduate students https://catalog.gmu.edu/policies/academic/grading/ Raw scores may be adjusted by the Instructor to calculate final grades. Final grades will be posted to https://patriotweb.gmu.edu which is the only vehicle for students to obtain those grades by the last day of the Term (December 19, 2018). Grades will be composed of the following items and weights:

Final grades will be composed of the following elements and weights:

- Quiz 1 ................... 20%
- Quiz 2 ................... 30%
- Quiz 3 ..................... 40%
- AIT Course Evaluation...10%, (This is an auto-generated evaluation by GMU)
  
Total: 100%

Mason Policies and Resources for Students

a. Students must adhere to the guidelines of the George Mason University Honor Code
b. Students must follow the university policy for Responsible Use of Computing
c. Students are responsible for the content of University communications sent to/from their George Mason University email account and are required to activate their account and check it regularly. All communication from the program will be sent to students solely through their Mason email account.
c. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance.
e. Students with disabilities who need accommodations in a course must register with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester.
f. University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing
g. Diversity and Religious Holidays
h. Student Privacy
i. University Libraries
j. Family Education Rights and Privacy
**SCHEDULE**: Class schedule for this semester includes: (June 3 – July 27, 2019)

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topics</th>
<th>Reading/Assignments</th>
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| 1    | 6.3.19 | **FEDERAL ACQUISITION ENVIRONMENT**  
    Video: Federal Government Primer  
    Video: How to Brief a Case Study  
    Video: Acquisition Background & Basics | Rendon & Snider, Ch. 1, 2  
    DAU, Ch. 1, 2, 4 |
| 2    | 6.10.19 | **PROJECT MANAGEMENT; ACQUISITION LIFE CYCLE**  
    Video: Project Management Concepts  
    Video: Acquisition Life Cycle  
    Video: Certifying AMRAAM  
    SYSTEMS ENGINEERING  
    Video: Systems Engineering | Rendon & Snider, Ch. 3, 4, 14  
    DAU, Ch. 3, 5, 7  
    Case: Certifying AMRAAM  
    NRC Report |
| 3    | 6.17.19 | **QUIZ I (20%)**  
    Quiz I: Weeks 1-2 |
| 4    | 6.24.19 | Video: TBMCS  
    Systems Engineering, Software Project Management  
    Video: Software Project Management | Case: Theater Battle Management Core System  
    Rendon & Snider, Ch 5 |
| 5    | 7.1.19 | **LOGISTICS; TEST & EVALUATION**  
    Video: Logistics  
    Video: Test and Evaluation Management  
    **RISK MANAGEMENT: EVM**  
    Video: Risk Management  
    Video: EVM  
    Video: Pharaoh Case | Rendon & Snider, Ch. 6, 7, 8, 12  
    Paper: The Pharaoh |
| 6    | 7.8.19 | **QUIZ II (30%)**  
    Quiz II: Weeks 4-5 |
| 7    | 7.15.19 | **FEDERAL BUDGET PROCESS**  
    Video: Federal Budget Process  
    CONTRACTING  
    Video: Federal Contracting | Rendon & Snider, Ch. 10, 11, 13  
    CRS, “Introduction to Federal Budget Process”  
    CRS, “A Defense Budget Primer” |
| 8    | 7.22.19 | **USAF TANKER ACQUISITION**  
    Case: Boeing Tanker Lease Case  
    MEDIA and OTHER PLAYERS  
    Case: Neutron Bomb  
    Case: John Lehman and the Press | Case: Boeing Tanker Lease (A) & (B)  
    Case: Press and the Neutron Bomb  
    Case: John Lehman and the Press |
| 8    | 7.22.19 | **FINAL QUIZ (40%)**  
    MUST BE COMPLETED by 7.27.19 | Quiz III: weeks 7-8 |