Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500). See [http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/] for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL
(Attach copy of syllabus)

<table>
<thead>
<tr>
<th>SUBMITTED BY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
</tr>
<tr>
<td>Prepared by</td>
</tr>
<tr>
<td>Email Contact</td>
</tr>
<tr>
<td>College/School</td>
</tr>
<tr>
<td>Phone</td>
</tr>
<tr>
<td>Faculty Contact</td>
</tr>
</tbody>
</table>

1. ACTION DESIRED (CHECK ONE):
   - Trial Course
   - New Course

2. COURSE IDENTIFICATION:
   - Dept: HSEM
   - Course #: F417
   - No. of Credits: 3

   This course is for a concentration within the BEM degree. It requires a 300-level course as a prerequisite and 400-level status is appropriate.

3. PROPOSED COURSE TITLE:
   Cyber Security Resiliency

4. To be CROSS LISTED?
   - YES/NO
   - If yes, Dept:

   NOTE: Cross-listing requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.

5. To be STACKED?*
   - YES/NO
   - If yes, Dept:

   How will the two course levels differ from each other? How will each be taught at the appropriate level?*

   * Use only one Format 1 form for the stacked course (not one for each level of the course!) and attach syllabi. Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi (undergraduate and graduate versions) will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e., is there undergraduate and graduate level content being offered?); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online — see URL at top of this page.

6. FREQUENCY OF OFFERING: As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING:
   - Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants
   - (Effective AY2015-16 if approved by 3/31/2015; otherwise AY2016-17)

8. COURSE FORMAT:
   - COURSE FORMAT: (check all that apply)
     - 1
     - 2
     - 3
     - 4
     - 5
     - XX
     - 6 weeks to full semester
   - OTHER FORMAT (specify)
   - Mode of delivery: Lecture

   NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the Core Review Committee.
9. CONTACT HOURS PER WEEK:

<table>
<thead>
<tr>
<th></th>
<th>LECTURE</th>
<th>LAB</th>
<th>PRACTICUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>hours/weeks</td>
<td>3/15</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/guidelines-for-computing/ for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Example of a complete description:

FISH F487 W, O
Fisheries Management
3 Credits Offered Spring
Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

HSEM F417 Cyber Security Resiliency
3 Credits Offered as Demand Warrants
This course focuses on the challenges faced by organizational leadership resisting, responding, and recovering from cyber-attacks impacting business critical data. This course will further the understanding of a new and demanding career field emerging within the emergency management and homeland security fields. Without the knowledge of how to build a cyber security resilient organization, the future emergency manager will be lacking critical skills.

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities
S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.

YES: NO:

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive,
W = Writing Intensive,
X = Baccalaureate Core

11A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.

YES: NO: XX

12. COURSE REPEATABILITY:

Is this course repeatable for credit?

YES: NO: XX

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit?

TIMES

If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

If the course can be repeated with variable credit, what is the

CREDITS
13. **GRADING SYSTEM:** Specify only one. Note: Changing the grading system for a course later on constitutes a Major Course Change - Format 2 form.

<table>
<thead>
<tr>
<th>LETTER:</th>
<th>XX</th>
<th>PASS/FAIL:</th>
</tr>
</thead>
</table>

**Restrictions on Enrollment (if any)**

14. **PREREQUISITES**

HSEM F301 or permission of instructor

These will be required before the student is allowed to enroll in the course.

15. **SPECIAL RESTRICTIONS, CONDITIONS**

16. **PROPOSED COURSE FEES**

<table>
<thead>
<tr>
<th>Amount</th>
<th>$</th>
</tr>
</thead>
</table>

Has a memo been submitted through your dean to the Provost for fee approval?

<table>
<thead>
<tr>
<th>Yes/No</th>
</tr>
</thead>
</table>

17. **PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?

<table>
<thead>
<tr>
<th>Yes/No</th>
</tr>
</thead>
</table>

If yes, give semester, year, course #, etc.:  

18. **ESTIMATED IMPACT**

**What impact, if any, will this have on budget, facilities/Space, faculty, etc.**

This course is primarily taught in a hybrid online/in class format so that the small HSEM classroom will be utilized. Adjunct faculty will teach the course.

19. **LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

<table>
<thead>
<tr>
<th>No</th>
<th>XX</th>
<th>Yes</th>
</tr>
</thead>
</table>

Cyber security materials will generally be used. In the event that other library materials will be needed, they will be contacted.

20. **IMPACTS ON PROGRAMS/DEPTs**

What programs/departments will be affected by this proposed action? Include information on the Programs/Departments contacted (e.g., email, memo).

There will be no impact on other departments. HSEM students are specifically drawn to this course.

21. **POSITIVE AND NEGATIVE IMPACTS**

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

There are no negative impacts. This course offers more options for HSEM BEM students to specialize in their chosen field.
JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

This is a new course designed to provide specific materials to those BEM students who are already in the cyber security field and wishing to advance, or to those new students who might be looking for their first career jobs. It provides more choices for BEM students and may expose some to a field they might never have thought about.

APPROVALS: Add additional signature lines as needed.

Signature, Chair, Program/Department of:  
Date  12/06/15

Signature, Chair, College/School:  
Curriculum Council for:  
Date  10/09/2015

Signature, Dean, College/School:  
School of Management  
Date  10/14/15

Offerings above the level of approved programs must be approved in advance by the Provost.

Signature of Provost (if above level of approved programs)  
Date  

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair  
Faculty Senate Review Committee:  
Curriculum Review  
GAAC  
Core Review  
SADAC  
Date  

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

Signature, Chair, Program/Department of:  
Date  

Signature, Chair, College/School:  
Curriculum Council for:  
Date  

Signature, Dean, College/School:  
Date  
ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at:
http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/uaf-syllabus-requirements/
The Faculty Senate curriculum committees will review the syllabus to ensure that each of
the items listed below are included. If items are missing or unclear, the proposed course
(or changes to it) may be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES
During the first week of class, instructors will distribute a course syllabus. Although
modifications may be made throughout the semester, this document will contain the
following information (as applicable to the discipline):

1. Course information:
   - Title, number, credits, prerequisites, location, meeting time

2. Instructor (and if applicable, Teaching Assistant) information:
   - Name, office location, office hours, telephone, email address.

3. Course readings/materials:
   - Course textbook title, author, edition/publisher.
   - Supplementary readings (indicate whether required or recommended) and any supplies required.

4. Course description:
   - Content of the course and how it fits into the broader curriculum;
   - Expected proficiencies required to undertake the course, if applicable.
   - Inclusion of catalog description is strongly recommended, and
   - Description in syllabus must be consistent with catalog course description.

5. Course Goals (general), and (see #6)

6. Student Learning Outcomes (more specific)

7. Instructional methods:
   - Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:
   - A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say “lab”. Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

9. Course policies:
   - Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:
    - Specify how students will be evaluated, what factors will be included, their relative value, and how they will be tabulated into grades (on a curve, absolute scores, etc.). Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C":

11. Support Services:
    - Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services: Note that the phone number and location have been updated.
    http://www.uaf.edu/disability/ The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.
    - State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

5/21/2013
HSEM 417: Cyber Security Resiliency (Fall 2016)
Credits: 3
Location: TBD based on classroom availability
Prerequisites: HSEM 301 or permission of instructor
Instructor: Tom Langdon
Adjunct Professor
School of Management, University of Alaska Fairbanks
Office: 230A Bunnell
Office Hours: TBD
Telephone: 907.474.1869
E-mail: tjlangdon@alaska.edu

Course Description:
This course focuses on the challenges faced by organizational leadership resisting, responding, and recovering from cyber-attacks impacting business critical data. This course will further the understanding of a new and demanding career field emerging within the emergency management and homeland security fields. Without the knowledge of how to build a cyber security resilient organization, the future emergency manager will be lacking critical skills.

Course Objectives:
Develop an understanding of:
- Relevancy of Cyber Security to organizations today
- Prevention and responses to cyber security incidents
- Assessment and management of ongoing cyber security risks
- Understanding of cyber security resiliency to protecting business continuity
- Understand industry best practices for resilient cyber architecture and infrastructure

Course Text Books:

Additional Reading:
Additional reading assignments have been selected from articles and Web Sites. Where possible, the course author has obtained permission to include session handouts of the assigned reading.

Instructional Method:
The course format includes lecture, directed reading assignments, class discussion board topics and internet-based assignments via Blackboard. Case Study presentations will additionally be utilized as part of the instructional method with guest speakers facilitating discussions through lecture and questions developed as a class. Recommended preparation: 2-4 hours weekly beyond class instruction.
Evaluations:

1. **Weekly Assignments/Discussion Board Management 30%**.
   
   A. Total of 5 Quizzes are worth 20 points each.
   
   B. Total of 10 Discussion Board Posts are worth 20 points each.

2. **Written Projects = 65%**

   A. Five (5) case study papers (100 points each): The papers are to be 3-4 pages in length and consistent with the APA format.
      
      i. These case studies will require you to identify a cyber security incident, research, and evaluate the incident. In your paper you will build a brief of the incident and how it was managed by the affected organization.
   
   B. Create a cyber disaster recovery and business continuity plan for a public or private organization (150 points)
      
      i. This plan should be 5-7 pages in length and will be developed in consultation with the instructor.

   ***For additional information on APA formatting: https://owl.english.purdue.edu/owl/resource/560/01/***

3. **IS – 523 Certificate = 5%**

   A. Completion of IS 523 FEMA Certificate = 5% (FEMA will only award the certificate with a passing score of 70%)

Grading:

Quizzes (5) & Discussion Board Management (10) = 30% (300 points)
Case Study Briefs (5 papers) = 50% (500 points)
Cyber Disaster & Business Continuity Plan = 15% (150 points)
IS 523 Certificate = 5% (50 points)
Total = 1000 points

A= 90-100%  B= 80-89%  C= 70-79%  D= 60-69%  F= 59 % or less

Course Policies:

Students are expected to attend and participate in both the class and discussions generated. Students will be penalized for the late submission of class assignments and for non—attendance (outside of emergency or mutually agreed upon circumstances). Plagiarism on assignments and cheating on exams will not be tolerated. Work is to be original efforts to address the specific assignment at hand (in other words, don't submit work from another course). Students caught plagiarizing or cheating will be disciplined according to the appropriate University of Alaska guidelines.

**Discussion Board etiquette:** When both posting and responding to the discussion board requirements, remember that these are graded activities. Content is to address the requirement at hand and in terms of a response, be respectful and constructive in nature. Be sure to read the discussion board rubric found in the rubric folder for the course.
Support Services:

Students are encouraged to schedule an initial appointment and utilize the UAF Writing Center in 801 Gruening, ph 474-5314, http://www.uaf.edu/english/writing-center/ for the first written case study review. Further assistance through the writing center is encouraged as needed to assist in the development and refinement of written products. Please contact me as required should you need to contact other subject matter support services relevant to the development of your leadership or classroom projects/topics. Distance students have access to the tutoring as well.

Students with Disabilities:

Students with learning or other disabilities who may need classroom accommodations are encouraged to make an appointment with the Office of Disability Services (Phone # 474-5655). Please inform me of your needs and if I need to meet with the Office of Disability Services to provide the appropriate accommodations and support to assist you in meeting the goals of the course.
Course Schedule:

Week 1:
Introduction
Review Syllabus
Assign Cyber Continuity Plan

Week 2:
Reading:
- Chapter 1 in Whaling Text
- Chapter 1 in Axelos Text
Discussion Board #1: Introductions

Week 3:
Reading:
- Chapter 2-4 in Whaling Text
Discussion Board #2
Assign Case Study #1

Week 4:
Reading:
- Chapter 2 in Axelos Test
Discussion Board #3: Risk Approaches

Week 5:
Reading:
- Chapter 3 in Axelos Text
Quiz 1
Case Study #1 Due

Week 6:
Reading:
- Chapter 4 Axelos Text
Quiz 2

Week 7:
Reading:
- Chapter 4 in Axelos Text
Discussion Board #4
Assign Case Study #2

Week 8
FEMA IS 523
Quiz #3
Discussion Board # 5

Week 9
Reading:
- Chapter 5 Axelos Text
Case Study #2 Due
Discussion Board #6
Assign Case Study #3

**Week 10**
Reading
-Chapter 6 Axelos Text
Discussion Board #7

**Week 11**
Reading
-Chapter 7 Axelos Text
Quiz 4
Case Study #3 Due
Assign Case Study #4

**Week 12**
Reading
-Chapter 7 Axelos Text
Discussion Board #8

**Week 13**
Reading
-Chapter 8 Axelos Text
Discussion Board #9
Case Study #4 Due
Assign Case Study #5

**Week 14**
Reading
-Chapter 9 Axelos Text
Quiz 5

**Week 15**
Reading
-current event topic defined by instructor
Case Study #5 Due
Discussion Board #10

**Week 16**
Finals Week (no finals for this course)
Cyber Continuity Plan Due