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)

SUBMITTED BY:

Department	**Homeland Security and Emergency Management**	College/School	**School of Management**
Prepared by	**Amber Lammers**	Phone	**Ext. 4622 or 6736**
Email Contact	**allammers@alaska.edu**	Faculty Contact	**Cameron Carlson, cdcarlson@alaska.edu; ext 6537**

1. ACTION DESIRED (CHECK ONE):

Trial Course		New Course	XX

2. COURSE IDENTIFICATION:

Dept	**HSEM**	Course #	**F416**	No. of Credits	**3**

Justify upper/lower division status & number of credits:
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 Management**

4. To be CROSS LISTED? YES/NO — **No** — If yes, Dept: ____ Course # ____

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 — **No** — If yes, Dept. ____ Course # ____

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 out 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**

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (Effective AY2015-16 if approved by 3/31/2015; otherwise AY2016-17)   **TBD**

8. COURSE FORMAT:

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.**

COURSE FORMAT: (check all that apply)		1		2		3		4		5	XX	6 weeks to full semester

OTHER FORMAT (specify)	

Mode of delivery (specify lecture, field trips, labs, etc)	Lecture

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9. CONTACT HOURS PER WEEK:	**3/15**	LECTURE hours/weeks		LAB hours /week		PRACTICUM hours /week

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 F416   Cyber Security Management 3 Credits   Offered as Demand Warrants This course focuses on developing an understanding of the concepts, trends and strategies associated with cyber security and managing the risk associated with information systems. This course will enable managers to understand risks associated with information technology, know how to develop compensating controls or mitigations and introduce how to implement them. These skills will be developed in two operating contexts: planning for normal operations and during an emergency event/incident. Planning process, mitigation strategies, detection and recovery associated with cyber security and risk management will be covered.

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, **Format 6**		W = Writing Intensive, **Format 7**		X = Baccalaureate Core	

11.A *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 <u>variable</u> credit, what is the maximum number of credit hours that may be earned for this course?		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.

LETTER: **XX**   PASS/FAIL: [ ]

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 $

Has a memo been submitted through your dean to the Provost for fee approval?
Yes/No

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously?
Yes/No   **No**

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.

No **XX**   Yes [ ]   **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 chose field.

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.

	Date	12 Oct 15
Signature, Chair, Program/Department of:	HSEM	

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

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

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

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

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

	Date	
Signature, Chair Faculty Senate Review Committee:	___Curriculum Review ___GAAC	
	___Core Review ___SADAC	

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

	Date	
Signature, Chair, Program/Department of:		

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

	Date	
Signature, Dean, College/School of:		

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
(make sure that contact hours are in line with credits).

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":
http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf

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# 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 416: Cyber Security Management
Credits: 3
Prerequisites: HSEM 301 or permission of Instructor
Location: TBD based on classroom availability
Instructor: Nathan Zierfuss-Hubbard
Office: Butrovich 103B
Office Hours: TBD
Telephone: 907-450-8112
e-mail: nathan.zierfuss@alaska.edu

Course Description

This course focuses on developing an understanding of the concepts, trends and strategies associated with cyber security and managing the risk associated with information systems. This course will enable managers to understand risks associated with information technology, know how to develop compensating controls or mitigations and introduce how to implement them. These skills will be developed in two operating contexts: planning for normal operations and during an emergency event/incident. Planning process, mitigation strategies, detection and recovery associated with cyber security and risk management will be covered.

Course Objectives:

Develop an understanding of:
- Cyber risks, mitigations and controls.
- Establish and understanding of trade offs between cyber security and operations.
- Enable critical thinking about cyber risk, cost of controls and risk tolerance.
- Cyber security and risk management strategy development and management.

Course Textbook(s):

- Information Assurance Handbook: Effective Computer Security and Risk Management Strategies, (2015), 1st edition, Schou, C., Hernandez, S., McGraw-Hill (ISBN 978-0071821650)

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 and current topics in cyber security research will be used to supplement the text material, highlight emerging trends and include developing areas of cyber security.

Reading and online lecture time: 3-4 hours weekly
Recommended preparation: 2-3 hours weekly beyond reading and online lecture time

Evaluations:

1. Weekly Assignments/Discussion Board Management 42% (420 points)
   - A.   Weekly Assignments are worth 20 points each.
     - i.   Multiple choice and/or short answer essay questions
     - ii.   Due Thu. at 11:59p
   - B.   Discussion Board Posts are worth 30 points each.
     - i.   Initial response to discussion board posts are due Wed. at 11:59p for 10 of 30 points
     - ii.   2 follow-up responses are due Sun. at 11:59p for 10 of 30 points each
     - iii.   All post comment positions will be supported by at least 1 citation from the text or other reputable source (not Wikipedia).

2. Mid Term Test will account for 29% (290 points)

3. Final Paper 29% (290 points)

   - A.   The final paper will highlight a class of threats, the range of risks associated with them, common methods for controlling or compensating for the risks, environments where they exist noting any variation in risk level. One emerging approach to dealing with the threats will be introduced and discussed. Finally attention will be paid to how to incorporate controls and mitigations into planning for normal operations and how they get included during an emergency event.

   - B.   The paper (290 points) will be:

     - i.   original work supported by APA formatted citations from 3 sources,
     - ii.   1500 words.

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

Grading:

Weekly Assignments/ Discussion Board Management = 42% (420 points)
Mid Term Test = 29% (290 points)
Final Paper = 29% (290 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 watch instructor posted lectures and participate in discussions generated in Blackboard. Students will turn in work via Blackboard and late submission will not be accepted (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 topic 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 # 474-7043). 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:

Each week there is text reading assignment, there will be an accompanying on-demand lecture session available.

Week 1 (14-17 Jan)
Introductions, Introduction to leadership issues (relevance), Introduce Writing Assessment and ensure appointment is made with UAF Writing Center.

Readings
  ● Overview of course objectives and expectations.
  ● Review of writing standards (APA Format)
  ● Information Assurance Handbook; Chapter 1

Assignments
  ● Discussion Board #1- Introductions
  ● Pre-test – graded for participation ONLY and used to establish current understanding of Cyber Security

Week 2 (18-24 Jan)
Readings
  ● Information Assurance Handbook; Chapters 2 & 3
  ● Special topic People-Centric Security
Assignments
  ● Discussion Board #2
  ● Chapter Quiz #2

Week 3 (25-31 Jan)
Readings
  ● Information Assurance Handbook; Chapters 4 & 5
Assignments
  ● Discussion Board #3
  ● Chapter Quiz #3

Week 4 (1-7 Feb)
Readings
  ● Information Assurance Handbook; Chapters 6 & 7 (end of part 1)
Assignments
  ● Discussion Board #4
  ● Chapter Quiz #4

Week 5 (8-14 Feb)
Readings
  ● Information Assurance Handbook; Chapters 8 & 9 (start of part 2)
Assignments
  ● Discussion Board #5
  ● Chapter Quiz #5

Week 6 (15-21 Feb)
Readings
- Information Assurance Handbook; Chapters 10 & 11

Assignments
- Discussion Board #6
- Chapter Quiz #6

Week 7 (22-28 Feb)
Readings
- Information Assurance Handbook; Chapters 12 & 13

Assignments
- Discussion Board #7
- Chapter Quiz #7

Week 8 (29 Feb – 6 Mar)
Readings
- Information Assurance Handbook; Chapters 14 & 15 (end of part 2, start of part 3)

Assignments
- Discussion Board #8
- Chapter Quiz #8

Week 9 (7-13 Mar)
Readings
- Information Assurance Handbook; Chapters 16 & 17

Assignments
- Discussion Board #9
- Chapter Quiz #9

Week 10 (14-20 Mar SPRING BREAK)
Assignments
- Mid-term exam covering the contents of Chapters 1-7
- Due Mar. 21st at 11:59p

Week 11 (21-27 Mar)
Readings
- Information Assurance Handbook; Chapters 18 & 19 (end part 3)

Assignments
- Discussion Board #10
- Chapter Quiz #10

Week 12 (28 Mar - 3 Apr)
Readings
- Information Assurance Handbook; Chapters 20 & 21 (start part 4)

Assignments
- Discussion Board #11
- Chapter Quiz #11

Week 13 (4-10 Apr)
 Readings
   ● Information Assurance Handbook; Chapters 22 & 23
Assignments
   ● Discussion Board #12
   ● Chapter Quiz #12

Week 14 (11-17 Apr)
 Readings
   ● Information Assurance Handbook; Chapters 24 & 25 (end part 4)
Assignments
   ● Discussion Board #13
   ● Chapter Quiz #13

Week 15 (18-24 Apr)
 Readings
   ● Information Assurance Handbook; Chapters 26, 27 & 28
Assignments
   ● Discussion Board #14
   ● Chapter Quiz #14

Week 16 (25 Apr – 1 May)
 Readings
   ● Reading necessary to find sources for the final paper
Assignments
   ● Paper outline
   ● List of sources with 2-3 sentence summary relevance for each

Week 17 (2-6 May) Finals Week
Assignments
   ● Final paper