

FORMAT 1

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 & Emergency Management	College/School	School of Management
Prepared by	Anita Hughes	Phone	Ext 4622
Email Contact	Alhughes2@alaska.edu	Faculty Contact	Cameron Carlson, cdcarlson@alaska.edu

1. ACTION DESIRED

(CHECK ONE):

Trial Course ☐

New Course ☒

2. COURSE IDENTIFICATION:

Dept

HSEM

Course #

F607

No. of Credits

3

Justify upper/lower division status & number of credits:

This is a graduate-level course requiring critical thinking and analytic skills

3. PROPOSED COURSE TITLE:

Vulnerability and Protection

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:

Fall

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)

Fall 2015

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,

Lecture

etc)

9. CONTACT HOURS PER WEEK:

3/15

LECTURE
hours/week

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 F607 Vulnerability and Protection
3 Credits Offered Fall

This course examines security as a discipline and responsibility. The key focus of security is the protection of assets, whether in the public or private sector. It also includes management principles and concepts that practitioners can use to develop defensible and resilient operations, communities and businesses. The course explores the relationship of security to vulnerability and its role in the overall management of risk. It delves into the functions and responsibilities of security practitioners in public and private organizations, and broaches key aspects of institutional security concerns, including control of access, terrorist attack, critical infrastructure protection, insider threats and workplace violence. The course touches on the evolving nature of the homeland security enterprise and of protective concerns within a global context. Prerequisites: must be admitted to MSDM program; or permission of HSEM Program Director (3+0)

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:

XX

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 variable 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**

Must be admitted to MSDM program; or permission of HSEM Program Director

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.

There will be little to no impact. This is an online course so no space is required. Adjuncts will be used for teaching but students will be generating additional revenue in tuition. SOM has received a funding allocation for FY 15 to cover the expenses of developing courses and hiring adjuncts.

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

Generally library resources are not necessary for this topic. Current literature and events will be used in addition to texts.

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)

The Veterinary Medicine program is interested in partnering with HSEM on this graduate program. They believe this graduate program of courses will benefit their doctoral students and, therefore, would bring students to the MSDM program. Beyond this positive impact on both Vet Med and MSDM there should be no impacts on other departments.

21. **POSITIVE AND NEGATIVE IMPACTS**

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

This is part of a new program for which there is interest from around the country in addition to the Vet Med program. New students will be brought into the department and into contact with UAF which gives all University programs additional exposure. It meets a student need. These students will not generally be on campus or in Fairbanks so they generate no additional competition for student services or housing. No other impacts on other departments are anticipated.

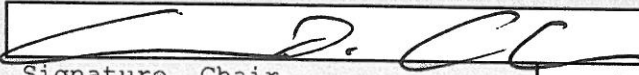
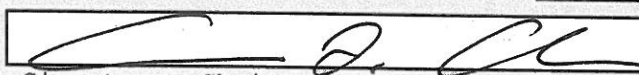
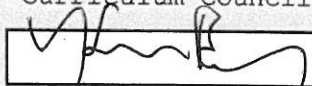
JUSTIFICATION FOR ACTION REQUESTED

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.

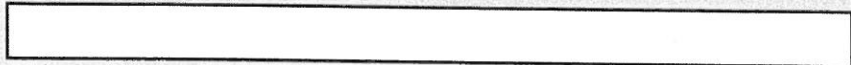
This course is part of the proposed new graduate program; Master of Security and Disaster Management. As indicated in the program proposal, there is increasing demand in this program from around the country as nothing like it exists.

The program and the courses proposed add to the level of critical thinking and analysis in topics that are important to leaders and managers in Homeland Security and Emergency Management fields across the board. Vulnerability and Protection covers the assessment of vulnerability of an organization, community, business, etc and also techniques and strategies for their protection. As Human Security, (HSEM F609) addresses security from a human basis, Vulnerability and Protection looks at organizational security. This is increasingly urgent as we live in a world where threats are as likely to come from attacks on our technology or through technology as they are directly on our infrastructure. Understanding this topic is critical for emergency managers in any organization.

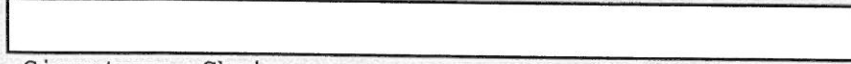
APPROVALS: Add additional signature lines as needed.

	Date	20/14
Signature, Chair, Program/Department of: HSEM Program		
	Date	20/14
Signature, Chair, College/School Curriculum Council for: HSEM Program		
	Date	10/2/14
Signature, Dean, College/School of: Som		

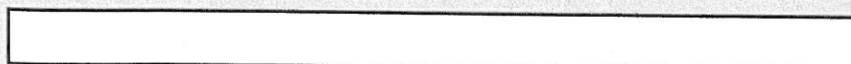
Offerings above the level of approved programs must be approved in advance by the Provost.

	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: <input type="checkbox"/> Curriculum Review <input type="checkbox"/> GAAC <input type="checkbox"/> Core Review <input type="checkbox"/> SADAC		

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

	Date	
Signature, Chair, Program/Department of:		

<div></div>		Date	<div></div>
Signature, Chair, College/School Curriculum Council for:		<div></div>	
<div></div>		Date	<div></div>
Signature, Dean, College/School of:		<div></div>	

HSEM F607 Vulnerability and Protection

Prerequisites: Graduate standing within the MSDM program

Location: Online via Adobe Connect / Blackboard

Meeting Time: TBD

Instructor: Nick Catrantzos
Phone: 916 915-3382

Email: ncatrantzos@alaska.edu

Office hours: By appointment (via Adobe Connect) Location: Sacramento, CA

Required Texts: Required Textbooks

1. *The McGraw-Hill Homeland Security Handbook: Strategic Guidance for a Coordinated Approach to Effective Security and Emergency Management, 2nd Edition*, David G. Kamien, Editor, New York: McGraw-Hill, 2012, ISBN 978-0-07-179084-0 and e-ISBN 0-07-179085-3. [This is one of two texts that students must purchase, and it is available in hard copy or e-book versions.]
2. *Managing the Insider Threat: No Dark Corners*, Nick Catrantzos, Boca Raton: CRC Press, 2012, ISBN 978-1-4398-7292-5 and e-ISBN 978-1-4398-7293-2. [This is the second of two texts that students must purchase, and it is available in hard copy or e-book versions.]
3. 2001 *US Army Field Manual 3-19.30 on Physical Security*. Instructor will make this available as an electronic document via Blackboard. It is also available at <http://archive.org/details/milmanual-fm-3-19.30-physical-security>.
4. *Vulnerability Assessment of Federal Facilities*, prepared by the U.S. Marshal's Service for the Department of Justice in the aftermath of the Oklahoma City bombing. Instructor will make this available as an electronic document via Blackboard. It is also available at http://itlaw.wikia.com/wiki/Vulnerability_Assessment_of_Federal_Facilities
5. U.S. Environmental Protection Agency, (2005). *Recommendations of the National Drinking Water Advisory Council to the U.S. Environmental Protection Agency on Water Security Practices, Incentives, and Measures*. Washington, DC: EPA. Instructor will make this available as an electronic document via Blackboard. It is also available at http://www.epa.gov/safewater/ndwac/pdfs/wswg/wswg_report_final_july2005.pdf
6. *Facilities Physical Security Measures Guideline*, 2009, ASIS International. Instructor will make this available as an electronic document via Blackboard. It is also available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB4QFjA&url=http%3A%2F%2Fwww.acc.com%2F_cs_upload%2Fv1%2Fmembersonly%2FArticle%2F945064_1.pdf&ei=kcsMVNUtg8aLAtfygegL&usq=AFQjCNGzez91ggkZ6K8zOmT2JCiWNIsFw&bvm=bv.74649129.d.cGE.

Course Description:

The course examines security as a discipline and responsibility whose key focus is the protection of assets, whether in the public or private sector. It also includes management principles and concepts that practitioners can use to develop defensible and resilient operations, communities, and businesses. The course explores the relationship of security to vulnerability and of its role in the overall management of risk. It delves into the functions and responsibilities of security practitioners within public and private organizations, and broaches key aspects of institutional security concerns, including control of access, terrorist attack, critical infrastructure protection, insider threats, and workplace violence. Additionally, the

course touches on the evolving nature of the homeland security enterprise and of protective concerns within a global context.

Course Goals:

Upon completion of the course students should have a firm grasp of security's definition and purview within the organization as well as with essential management processes and issues. Students should be able to demonstrate a working knowledge of the complexities protecting assets within a variety of professional and organizational settings and of the skills set required to integrate a variety of resources into crafting an effective defensive posture for a given institution or operation. Students will leave the course with a strong understanding of the objectives, methods, and terminology used by security managers and executives.

Student Learning Outcomes:

After this course, a student should be able to:

- Explain security as a function of vulnerability and explain how this factors into overall assessment of risk for a given facility, institution, or operation.
- Understand the concept of protection-in-depth and the value of security layering as a means of defending against a variety of threats.
- Recognize basic protective functions and key differences between the public and private sector models of security.
- Demonstrate an understanding of key security means and methods for countering threats, including the strengths and limitations of those methods.
- Distinguish the vulnerabilities and challenges associated with direct attacks and insider threats.
- Understand the interdependencies and cascading vulnerabilities associated with critical infrastructure protection and threats ranging from workplace violence to espionage as well as ordinary crime.

Instructional Method:

The course format includes a hybrid of online (synchronous and asynchronous) based video lectures, discussion board forums, reading assignments, and lessons. The primary portal for delivery will be UAF Blackboard which will be supplemented by Adobe Connect for video and face to face meeting purposes.

Recommended preparation: 4-6 hours weekly, including assigned reading and online participation.

Course Evaluation:

The course is designed to accommodate yet challenge busy schedules of working professionals and full-time students alike. Each student has the flexibility to complete assigned material up to one week ahead and nine days past weekly class dates. As the class goes forward, more and more lessons open up for students to complete at their convenience. One caution, however, is that no one should complete one of the mandatory discussion posts for a given lesson without having actually read the assigned material or reviewed the lecture and lecture notes for that lesson. Discussion forum postings end when all other deliverables for a given lesson are due, so there is no late credit for participating in a discussion after everyone else in the class has moved on to another lesson. Otherwise, the student's discussion benefits neither the student posting it nor classmates reading it.

The objective of graded activities is to supply confirmation that the student has interacted thoughtfully with course material and engaged professionally in applying knowledge gained in course work. Weekly reviews in the form of completed assignments and coherent online discussions will account for most of the graded course work. The remainder will be based on three papers spread throughout the semester, namely one paper that comes due every five lessons. In the event tests are used to reinforce learning,

they will be true-false or multiple-choice, and also open-book.

Students will be able to track their progress and know exactly where they stand from one week to the next based on their cumulative scores across the foregoing assigned activities. The basis for grading and associated grading scale follow below.

Weekly Discussion Management :

Students will be graded weekly on their response to weekly discussion board questions that challenge them to apply the week's lesson to a real-world case study or problem. Students will need to demonstrate critical thinking in their analysis of the problem and to arrive at a solution through synthesis of what they have learned from assigned material and a certain level of independent research to cite relevant cases or examples that support their positions. Additionally, students will have to absorb and interact with the work product of their peers, providing constructive feedback to other student responses to the same problem or question.

The first discussion forum will be ungraded, in order to ease students into the weekly routine. Afterwards, each weekly discussion will be worth a maximum of 10 points, for a total of 140 points possible for the semester, based on 10 points possible a week for weekly, graded discussions from Lesson 2 to Lesson 15 (i.e. discussion homework graded from second to fifteenth week). All homework comes due 9 days after the official class date, which is a Thursday. The specific deadline is midnight as Saturday turns to Sunday, Fairbanks time, on the second weekend after the official class date. This scheduling gives students considerable flexibility in working around their other commitments.

Weekly Discussion Grading: 0-10 points. Each week, a discussion item appears in Blackboard for all students to address. This mandatory discussion forum is a way of allowing students to see what each other is thinking about the lesson. Students earn 5 points for posting a response that is at least a paragraph long and says something relevant about the topic in time. Students earn another 5 points by responding intelligently in complete sentences to one, single post of a fellow student. Students have the option of responding to more than one post of fellow students, but the additional responses are not graded. In order to gain the maximum score, students must (a) address the weekly discussion forum's question or issue and (b) comment intelligently on another student's post – all by the due date shown (i.e. 9 days from official start of each lesson). After the discussion period is over, the instructor will issue an announcement commenting broadly on the lesson's topic. Late discussion submittals will receive 0 points. The reason for this is that a late submittal amounts to nothing more than a monologue, since the discussion has closed.

Research Papers: 60 total points for semester, or 20 points each.

a. Paper 1 will come due one third of the way through the semester, sharing the deadline for homework with Lesson 5. It will require the student to respond coherently to an assignment that asks students to analyze a specific security-related activity and identify what needs to be protected and a suitable array of options for achieving desired protection. Students will be expected to present their findings in professional college-level prose that is clear, logically sound, and substantially free from errors of orthography and syntax. Students will also be required to support any analysis and recommendations by citing at least three sources that offer verifiable traces to either assigned reading or to other credible references that students have developed on their own. This paper must be 1,200-2,500 words in length. A paper that is (a) clear and (b) answers the assigned question(s) fully while being (c) written at the collegiate level and (d) substantially free of avoidable errors will earn 20 points. Deficiencies in any of areas (a) through (d) will each result in a deduction of 5 points.

b. Paper 2 will come two thirds of the way through the semester, sharing its deadline with Lesson 10. It follows the same structure and grading rubric as Paper 1. It will build on the first paper by challenging students to define three levels of protection, assign them to a given facility or operation based on criticality of function to be secured, and then establish a threshold for when to increase or

decrease protective posture, explaining the rationale for instituting such a shift and the resulting protective value. Total value: 20 points.

c. Paper 3 will come at the end, with Lesson 15, and also follows the same structure and grading rubric as the preceding papers. This paper will build on the preceding two, challenging students to posit ways to defeat their own security measures and to then discuss learning points and ramifications. Total value: 20 points.

Total Points Possible: 140 weekly (for discussions) + 60 (for three papers) = 200.

A+ grade: 95% or higher, 190 points or above.

A: 92% but below 95%, 184-189

A-: 90% but below 92%, 180-183

B+: 85 but below 90%, 170-179

B: 82 but below 85%, 164-169

B-: 80 but below 82%, 160-163

C+: 75 but below 80%, 150-159

C: 72 but below 75%, 144-149

C-: 70 but below 72%, 140-143

D+: 65 but below 70%, 130-139

D: 62 but below 65%, 124-129

D-: 60% but below 62%, 120-123

F: less than 60%, 119 or lower

Grades scored between 95% and 100% will equal an A+

Grades scored between 92% but less than 95% will equal an A

Grades scored between 90% but less than 92% will equal an A-

Grades scored between 85% but less than 90% will equal a B+

Grades scored between 82% but less than 85% will equal a B

Grades scored between 80% but less than 82% will equal a B-

Grades scored between 75% but less than 80% will equal a C+

Grades scored between 72% but less than 75% will equal a C

Grades scored between 70% but less than 72% will equal a C-

Grades scored between 65% but less than 70% will equal a D+

Grades scored between 62% but less than 65% will equal a D

Grades scored between 60% but less than 62% will equal a D-

Grades scored between 0% but less than 60% will equal an F

Additional documents and scholarly articles supplied by instructor for specific lessons.

Course Policies:

Students are expected to keep up with reading and assignments, and to participate in discussions generated. Students will lose points for failure to engage in discussion forums in time to have meaningful interaction on the topics under discussion.

Plagiarism on assignments and cheating on papers will not be tolerated. Students caught plagiarizing or cheating will be disciplined according to the appropriate University of Alaska guidelines.

Support Services:

For assistance in improving written products, take advantage the UAF Writing Center in 801 Gruening, 907 474-5314. Please reach out to the instructor or support staff for subject matter support services relevant to the development of your classroom projects/topics.

Students with Disabilities:

Students with learning or other disabilities who may need special accommodations are encouraged to make an appointment with the Office of Disability Services, <http://www.uaf.edu/disability/> (907 474-5655 or TTY at 907 474-1827). Please inform your instructor of any impediments to meeting course objectives which cannot be fully addressed by the Office of Disability Services. I will work with the Office of Disabilities Services (208 Whitaker Bldg) to provide reasonable accommodation to students with disabilities.

Course Calendar:

PART I: Overview

Week 1: General Definitions, Criticality, and Starting Point for Protection

Week 2: Risk and Vulnerability

Week 3: Homeland Security and the Role of Resilience in Mitigating Risk

Week 4: Security Standards and Sources

Week 5: Levels of Security and Protection in Depth

PART II: Means and Methods

Week 6: Security Sentinel Functions

Week 7: Access Issues and Determining Whom and How to Trust with Critical Assets

Week 8: Role of Physical and Information Security

Week 9: Security Response in Public and Private Sectors

Week 10: Lawful Disruption, CPTED, and Defenses without Police Powers

PART III: Existential Vulnerabilities and Institutional Challenges

Week 11: Terrorism and Direct Attack

Week 12: Critical Infrastructure Protection

Week 13: Insider Threats and Workplace Violence

Week 14: Ordinary, Decent Crime (With Cumulative Losses that Can Be Worse than Sabotage)

Week 15: Espionage and International Threats