Dr. Sylvia Hill, Chairperson of the Criminal Justice, Sociology and Social Work Program within the Department of Urban Affairs, Social Science, and Social Work, sends forth a proposal for a:

⇒ Homeland Security Science and Technology Concentration that could be added to any major earned by a student at the University. The Department hopes to have this concentration approved this Spring so that May 2012 graduates can have the concentration listed on their transcripts.

The College Curriculum Committee recommends:

⇒ Approval of this proposed concentration because it is not a new program and because it does not require additional resources from Urban Affairs or the College. We consider it a plus that students in any field could earn this concentration as a bonus to their major degree. Furthermore, the Committee considers the research areas expansive. (The proposal is well organized and the project is funded.)

This recommendation emerges from the College Curriculum Committee’s consideration of the following: the aforementioned program proposal and heard testimony from Dr. Sylvia Hill in February of 2012.
UNIVERSITY OF THE DISTRICT OF COLUMBIA
UNIVERSITY SENATE
ACADEMIC PROGRAMS
TRANSMITTAL FORM

TYPE OF REVIEW REQUESTED

Approve New Program Concentration in Homeland Security, Science & Technology

Department Curriculum Committee Chair

Department Chair

College/School Curriculum Committee Chair

College/School Dean/Director

University Senate ASPPC Chair

University Senate President

Provost

University President (if required)

Board of Trustees Chair (if required)
To: Dr. April Massey, Associate Dean

From: Dr. Sylvia Hill, Chairperson
Criminal Justice, Sociology and Social Work

Subject: Homeland Security Science and Technology Concentration

Date: December 12, 2011

I am requesting that the approval process for the concentration in Homeland Security Science and Technology be expedited so that the first graduates in spring 2012 may have the concentration designated on their transcripts.

The concentration has been approved by the Department’s Curriculum Committee and Dr. El-Khawas will submit that document today. My understanding is that if approved by the Department’s Curriculum Committee, then it will require your approval before I can submit a request to the Registrar for transcript inclusion.

Thank you in advance for your attention to this matter.
Proposal for New Program Concentration in
Homeland Security Science & Technology

A. The type of review requested: New Program Concentration

B. Description of proposed program change, courses, requirements, prerequisites, and syllabi as applicable.

The Administration of Justice program at the University of the District of Columbia proposes to add a concentration in Homeland Security Science & Technology (HSST). The HSST Concentration is required for students who are the recipients of Department of Homeland Security Scientific Leadership Awards Scholarships. It is an option for other STEM majors. Homeland security refers to the broad national effort by all levels of government to protect the territory of the United States from hazards: internal and external, natural and man-made. The HSST Concentration is aligned with the priorities of the DHS Science & Technology Directorate. The University’s designated priority S & T research area is the social and behavioral sciences, however there are sixteen other priority S & T research areas relevant to the different STEM disciplines at UDC.

The HSST Concentration will require a total of 15 credit hours of which it is expected that only nine hours would represent additional courses outside the major. The HSST concentration will consist of includes 9 hours of coursework in the JCSS program and six hours of courses in the student’s major. The six hours in the major includes a required senior project on an approved HSST topic. The required courses for the HSST concentration are:

- Homeland Security¹
- Science & Technology in Homeland Security
- Constitutional Law²
- An HSST designated course in the student’s major
- Senior project on an approved HSST topic

Each course is three credit hours.

Of these courses, the only new course offering

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¹ Already existing course 1127-340
² Already existing course 1125-300
required is: HSST. In addition, it is proposed to add a course in Terrorism. Course
descriptions for the two new courses are contained in the Appendix.

C(1) Demonstration of need (including internal and external supporting data)

Approximately 50% of the federal government’s expected 193,000 new hires in the next
two years are expected to be in the area of homeland security. This does not include
hiring by state and local governments and the growing demand in the private sector by
government contractors. As noted by the Department of Homeland Security there is a
need for underrepresented minorities to pursue homeland security science and technology
fields. This is why the DHS issued a Scientific Leadership Award for Minority Serving
solicitation specifically targeted towards Minority Serving Institutions.

C(2) Congruence with academic unit objectives and university mission.

The proposed concentration is congruent with the objectives of the criminal justice
program and with the University mission. It is part of a continuing evolution of our
program to be responsive to changes in the academic discipline, labor market needs, and
constituent demands.

C(3) Avoidance of duplication or overlap with existing courses or programs.

The proposed program does not duplicate or overlap with any existing courses or
programs at the University.

C(4) Relationship with other programs/departments/schools/colleges/with written
response from those concerned.

The overall vision is that other STEM programs at the University will either develop a
course for their majors that is aligned with one of the DHS S&T priority research areas
indicated on page one, or will develop modules to go in already existing courses. For
example the Food Science program might develop a course in Food-borne Pathogens; or
the Physics program might develop a module related to improving sampling, detection,
and characterization of explosive threats, etc. These modules and courses would then
expand exposure to homeland security S & T concepts to students beyond those enrolled
in the HSST Concentration.

C(5) Standards of relevant accrediting agencies and/or professional societies

N/A: The Academy of Criminal Justice Sciences (ACJS) is the professional association
for criminal justice programs. It provides program review, but not program accreditation.
At present there are no accrediting agencies for homeland security. However, this
concentration is aligned with the priorities of the Department of Homeland Security’s
Science and Technology Directorate.
C(6) Number of students immediately affected if relevant.
Projected enrollment, if relevant.

Funding has been provided for 5 SLA scholars annually, however, it is anticipated that another 10 - 15 students annually will matriculate with this concentration. In addition however, other students may be interested in taking one or more of these classes without adding the concentration.

C(7) Effect on student development, employment, or program effectiveness, if relevant.

The addition of the Homeland Security Science & Technology Concentration to a student’s course of study would also have a significant effect on their development and employability. This is particularly true in the STEM fields where many students have an interest in a particular STEM field but do not want to go to graduate or medical school. The HSST concentration would provide exposure to a wide-ranging area where their undergraduate STEM degree would be useful.

C(8) Adequacy and appropriate qualification of current faculty and support staff. Identify additional needs if any.

There are appropriately qualified faculty members in the primary areas of this program. However, adjunct faculty will be hired where necessary both to take advantage of the specialized expertise found in the Washington metropolitan area and to expose our students to professionals working in the field, and expose potential employers to our future graduates.

C(9) Adequacy of current facilities (offices, classrooms, labs, etc.)

The current facilities are adequate to support this program.

C(10) Adequacy of supplies and equipment. Identify additional needs, if any

Supplies and equipment are adequate at present. This concentration builds on the already existing capacities of the degree granting programs in which the students’ will be matriculating.

C(11) Estimated costs, available funds and probable funding sources

This budget presented in this section is preliminary since the actual fiscal impact statement will be prepared by the Budget Office. Only one course in the concentration will be offered each semester. The income from the tuition scholarships provided to the five SLA scholars annually would be approximately $40,000 (based on current tuition costs), or $20,000 a semester. Even if an adjunct were hired at $5,000 a course, that still leaves the University with a net gain of $15,000 per semester. This assumes that no one other than the five scholarship recipients are enrolled in the particular course. Since only
two of the courses are new, the other courses would be offered anyway and represent no additional cost to the University.

C(12) Adequacy of supportive library and technical resources.
Supportive library and technical resources are adequate.
The supportive library and technical resources are adequate to support this program.

D. If the proposal is for program change(s) or deletion(s), the following information should be provided in addition to relevant items required in item C above.
N/A

E. Proposed date of implementation
Immediately
APPENDIX

Course Descriptions
Syllabi
### Course Descriptions for new Course Offerings

<table>
<thead>
<tr>
<th>Course Name &amp; Number</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science &amp; Technology in Homeland Security</td>
<td>This course provides an overview of the homeland security science and technology priority research areas. These areas include: advanced data analysis and visualization; biological threats and countermeasures; border security, chemical threats and countermeasures communications and interoperability; community, commerce and infrastructure resilience; emergency preparedness and response; explosives detection, mitigation and response; food and agriculture security; human factors; immigration studies; infrastructure protection; maritime and port security; natural disasters and related geophysical studies; risk, economics, and decision sciences; social and behavioral sciences; as well as transportation security.</td>
</tr>
<tr>
<td>Terrorism</td>
<td>This course provides an overview of the typologies of terrorism both domestic and international; as well as the differing types of individuals who engage in terrorist activity. It includes exploration of the role of motivators in the emergence of terrorist activity. Also explored are counter-terrorism strategies.</td>
</tr>
</tbody>
</table>
COURSE: Science & Technology in Homeland Security

Course Description:
This course provides an overview of the homeland security science and technology priority research areas. These areas include: advanced data analysis and visualization; biological threats and countermeasures; border security, chemical threats and countermeasures communications and interoperability; community, commerce and infrastructure resilience; emergency preparedness and response; explosives detection, mitigation and response; food and agriculture security; human factors; immigration studies; infrastructure protection; maritime and port security; natural disasters and related geophysical studies; risk, economics, and decision sciences; social and behavioral sciences; as well as transportation security.

Required Texts: N/A
Students will be expected to read the source material online from the websites of the relevant Department of Homeland Security Center of Excellence.

Course Outcome Objectives:

1. The student successfully completing this course should be able to identify and define the 17 homeland security science and technology priority research areas including their area of emphasis, threats, and countermeasures.

2. Students will be aware of the DHS Centers of Excellence and their primary focus and research agenda

3. Students will demonstrate an understanding of a key research emphasis in each of the priority research areas as well as identify pertinent trends.
CURRICULUM PROPOSAL GUIDELINES: Program OFFERINGS

4. Students will be able to describe a researchable project in each of the S&T priority research areas.

**Cheating/Plagiarism Statement:**

Students enrolling at the University of the District of Columbia assume the obligation to maintain standards of academic integrity. Violations of academic obligations include: unethical practices and acts of academic dishonesty, such as cheating, plagiarism, falsification, and the facilitation of such acts.

Cheating includes the actual giving or receiving of any unauthorized aid or assistance or the actual giving or receiving of any unfair advantage on any form of academic work. Plagiarism is the use of another’s ideas or words, or both, as if they were one’s own. However, ideas or direct quotations from others are acceptable with appropriate citation of source.

Students are subject to dismissal from a degree program for unethical practices and acts of academic dishonesty. It should also be stated that a plea of ignorance of the policy would not be accepted. The following actions are prescribed whenever a violation of academic integrity is noted:

- The Instructor will provide to the chairperson a written report with documentation of the academic offense.
- The chairperson will present the facts to the departmental Academic Affairs Committee.
- The departmental Academic Affairs Committee will review the report, meet with all parties concerned, and make a formal recommendation to the department chair for transmittal to the academic dean.

If it is determined that a student has violated the Academic Integrity Policy, the academic dean may suspend the student from the University.

**Americans with Disabilities Act Statement:**

If you are a student who is disabled as defined under the Americans with Disabilities Act and requires assistance or support services, please seek assistance through the Office for Services to Students with Disabilities, Building 38, Room A-11, or online at [www.udc.edu](http://www.udc.edu).

**Equality Opportunity and Affirmative Action Statement:**

The University of the District of Columbia actively subscribes to a policy of equal opportunity in education.

**Sexual Harassment and Racial Discrimination Policy Statement:**

It is the policy of the University of the District of Columbia that sexual harassment and racial harassment in any way of its students, staff and applicants for admission to the University are prohibited.
Change of Date Disclaimer:
While every attempt will be made to keep the dates as they have been stated it is possible that dates for assignments and classroom activities may change.

Rubrics for Oral and Written Presentations:
Handout will be given at beginning of course.

Grades:
TBA

Dates for Submission of Assigned Work:
TBA

Instructional Methodologies:
This course will employ both active and passive teaching techniques: lectures, discussions, exercises, case studies, student online class presentations and examinations. Students are strongly encouraged to participate extensively, ask questions, express ideas and opinions, and challenge traditional ideas and concepts. Instructional methodologies will emphasize critical thinking, problem solving and reasoning over simple memorization.

Requirements for Class/Course Policies:

- Class Attendance Policy:
The University expects all students to attend classes on a regular basis. Features built into Blackboard will be used to monitor attendance. If a student finds it necessary to be absent from class because of illness or other personal reasons, the reason for the absence should be reported to the instructor. This is for the instructor's information and in no way excuses the absence, nor does it relieve the student of the responsibility for assignments covered during the period of absence. Extenuating circumstances, which may force a student to be absent, should be reported to the departmental office and to the instructor. The instructor will determine the amount of assistance a student will need to complete the course requirements. It is important that students attend all regularly scheduled online classes.

- Make-up examinations/Late assignments:
There will be no make-up examinations or quizzes given. Students are responsible for any work assigned during their absence and should check with other classmates via the Blackboard feature for assignments. Assignments not submitted by the due date, without a medical excuse, will be considered late and will receive one-half of the credit for the paper or no credit.
 Written Work Requirements
All written work for this class must conform to the following guidelines:

- All written work must be typed, double-spaced with one-inch margins, and in twelve-point font. Students should insert two spaces between sentences and indent paragraphs five spaces. Students should not insert a line space between paragraphs.
- All papers should have a title, centered at the top of the first page, in twelve-point font. Students should include a title page with their papers.
- All pages should include the author’s name on the left margin of the "header" and the page number on the right margin of the "header."
- All sources must be cited. Guidance on how to compose citations can be found in the American Psychological Association Style Manual.
- Students are encouraged to take advantage of UDC’s Writing Center and its online access feature. Note the Writing Center’s presence on Blackboard under your list of organizations on your Blackboard Homepage. You have the option of having the Writing Center review your work BEFORE you turn it in to your Instructor, by using the e-mail feature found on the Writing Center's Blackboard site --- http://udc.blackboard.com. Also, for a schedule of Writing Center workshops, tutorials and other events, check Blackboard.

COURSE OUTLINE

I. Advanced Data Analysis and Visualization
II. Biological Threats and Countermeasures
III. Border Security
IV. Chemical Threats and Countermeasures
V. Communications and Interoperability
VI. Community, Commerce and Infrastructure Resilience
VII. Emergency Preparedness and Response
VIII. Explosives Detection, Mitigation and Response
IX. Food and Agriculture Security
X. Human Factors
XI. Immigration Studies
XII. Infrastructure Projection
XIII. Maritime and Port Security
XIV. Natural Disasters and Related Geophysical Studies
XV. Risk, Economics, and Decision Sciences
XVI. Social and Behavioral Sciences
XVII. Transportation Security
COURSE: Terrorism

Course Description:
This course provides an overview of the typologies of terrorism both domestic and international; as well as the differing types of individuals who engage in terrorist activity. It includes exploration of the role of motivators in the emergence of terrorist activity. Also explored are counter-terrorism strategies.

Required Texts:

Course Outcome Objectives:

1. The students successfully completing this course should be able to apply traditional and emergent theories, concepts and practices associated with identifying and responding to terrorist threats in the real world.

2. Demonstrate an understanding of historical factors, geo-political trends, diverse world cultures and sub-cultures from a variety of points of view and their impact upon the development of terrorist ideas and structures.

3. Demonstrate an understanding of the course of operations most frequently used in identifying and combating international terrorist threats.
CURRICULUM PROPOSAL GUIDELINES: Program OFFERINGS

4. The course will involve and expose students to the use of case studies and case study analysis, as well as the use of simulations to better understand the subject area content and system dynamics in international terrorist threat detection and response.

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**COURSE OUTLINE**

I. Defining Terrorism: Means, Ends and Motives

II. Understanding the Facilitators of Modern Terrorism

III. The New Terrorism

IV. Religion and the Intersection with Terrorism

V. Modern Methods and Modes of Attack

VI. Terrorism and the Media

VII. Challenges of Terrorism to a Free Society

VIII. Strategies and Approaches for Combating Terrorism

IX. Leveraging the Role of the Private Sector

X. Winning the War on Terrorism