

BOARD OF TRUSTEES
UNIVERSITY OF THE DISTRICT OF COLUMBIA

UDC Resolution No. 2016-

SUBJECT: Approval of a Bachelor of Arts Degree Program in Urban Sustainability

WHEREAS, pursuant to D.C. Official Code §38-1202.06(3), the Board of Trustees is authorized to establish or approve policies and procedures governing admissions, curricula, programs, graduation, the awarding of degrees, and general policy for components of the University; and

WHEREAS, pursuant to 8B DCMR § 308.1, new associate, baccalaureate, and graduate degree programs may be added to the University curricula upon recommendation by the Faculty Senate and the President and after approval by the Board; and

WHEREAS, the University's Vision 2020 Strategy plan expresses the commitment of the University to offer students flexible degree options that prepare them for careers in the new green economy, which careers require skills in environmental impact assessment, sustainable development, urban sustainability, and environmental project management across a broad range of fields, including the health and wellness field, the building trades, the hospitality sector, finance and law; and

WHEREAS, the University has offered several professional development workshops that have illustrated the effectiveness of flexible "meta-majors" (collections of academic majors that have related courses) in increasing student success and graduation rates, particularly for transfer students who bring academic credit(s) with them to the University; and

WHEREAS, the University of the District of Columbia and its College of Agriculture, Urban Sustainability and Environmental Sciences (CAUSES) are active partners in the Sustainable DC Initiative of the District of Columbia, which seeks to position Washington, DC to become the greenest, healthiest and most sustainable city in the United States; and

WHEREAS, the proposed Bachelor of Arts in Urban Sustainability degree program has received the approval of all levels of faculty and administration at the program level, the college level and university-wide;

NOW THEREFORE, BE IT RESOLVED that the University of the District of Columbia is hereby authorized to implement the Bachelor of Arts in Urban Sustainability Degree Program in accordance with the attached proposal, *provided that* any funds required to implement the program shall not be obligated until they have been identified and reprogrammed within existing University resources.

Submitted by the Academic and Student Affairs Committee

October 24, 2016

Approved by the Board of Trustees:

November 22, 2016

Elaine A. Crider
Chairperson of the Board

TO: The Board of Trustees
FROM: Managing Director of Finance *David L. Funderlin*
DATE: October 11, 2016
SUBJECT: B.A. Urban Sustainability

Conclusion

It is concluded that there is sufficient funding to support the implementation of the proposed Bachelor of Arts Degree Program in Urban Sustainability in the College of Agriculture, Urban Sustainability & Environmental Sciences (CAUSES).

Background

The new fast growing green economy requires skills in environmental impact assessment, environmental project management, sustainability literacy, and sustainable development across a broad range of career fields including the health and wellness sector, the hospitality industry, the building trades, finance, urban planning, law, and education. Demand for graduates who are sustainability literate and skilled in environmental assessment and management is growing rapidly across many career fields.

UDC students require a degree program that trains them in the sustainability skills of the green economy in a flexible manner that accommodates their pre-existing educational endeavors to the greatest extent possible. The curriculum for the proposed BA degree program in Urban Sustainability is designed as a meta-major. This curriculum model has a proven record of increasing student success and graduation rates particularly for transfer student populations who already bring preexisting academic credit to the University.

The proposed BA degree in Urban Sustainability has received the approval of all levels of faculty and administration at the program, the college, and the university level.

Financial Impact

The proposed BA degree program in Urban Sustainability will be supported by existing faculty resources from across the College of Agriculture, Urban Sustainability and Environmental, but especially through its land-grant specialists who have teaching responsibilities as a part of the

contract. No new courses will be added under the proposal. Additional faculty resources may become necessary once the program grows beyond 35 majors.

The Office of the Provost must monitor program milestones on an annual basis to determine continual viability of the program. This request has been approved based on the information provided. There are no anticipated risks at this time.

Emergency Curriculum Committee Minutes – April 22, 2015

Curriculum Committee Members in Attendance:

| | |
|-------------------|---|
| Genell Anderson | Urban Architecture and Community Planning |
| Thomas Kakovitch | Environmental Science |
| John Slack, Chair | Health Education |

- I. Welcome/Call to Order – Chairman Slack opened the meeting at 2:15 pm on April 22, 2015
- II. Confirmation of Quorum – Chairman confirmed that there was a quorum present
- III. New business:
 - Approval of curriculum for Bachelor of Science Degree in Architecture with a Concentration in Urban Sustainability
 - Approval of curriculum for Minor in Environmental Science

Urban Sustainability Concentration was reviewed and motion presented by Prof. Anderson and seconded by Dr. Slack. Prof. Anderson, Dr. Slack and Dr. Kakovitch approved the motion as presented. Dr. Jean-Baptiste and Dr. Ganganna provided proxy votes in favor of the motion. The motion passes unanimously.

Environmental Science Minor was reviewed and motion presented by Prof. Kakovitch and seconded by Dr. Slack. Prof. Anderson, Dr. Slack, Dr. Kakovitch approved the motion as presented in favor of the motion. Dr. Ganganna provided proxy vote abstaining. Prof. Jean-Baptiste provided a proxy vote opposing the motion. The motion passes 3 yes: 1 no

The transmittal was signed.

Meeting adjourned at 3:00

CURRICULUM PROPOSAL for a Meta-Major: Bachelor of Arts in Urban Sustainability

A. The Request

The College of Agriculture Urban Sustainability and Environmental Sciences (CAUSES) of the University of the District of Columbia is responding to the request by the University's President and Provost to develop strategies to increase graduation rates and student success at UDC.

UDC attracts a large number of transfer students. Many of these students bring a number of transfer credits with them. Yet often these credits are not consistent with the specific graduation requirements for any of the majors offered at UDC.

With the founding of the UDC community college, UDC moved its liberal studies major to the community college where students can obtain an Associate Degree in liberal studies. This leaves students, who wish to pursue a 4-year degree, without a general studies option that facilitates their expedient progress toward a 4-year degree.

Moreover, research on student retention and success conducted by Complete College America, suggests that a successful strategy to facilitate student success is to offer Meta-Majors. These broadly defined majors in a broad topical area or academic field offer students a more flexible course of study than a more narrowly defined major in a specific program or academic discipline. The Meta-Major has the added advantage of allowing a student to choose a degree that communicates an area of interest that aligns with his/her career aspirations.

The proposed Meta-Major in Urban Sustainability offers students a broadly defined degree option at the bachelor's degree level that indicates their interest in a career in the sustainable development, urban development, and environmental management field. The Meta-Major in Urban Sustainability will be offered as a BA degree.

The proposed Meta-Major can be combined easily with a minor in various academic fields represented in CAUSES, CAS, SEAS, and SBPA. The proposed major therefore offers students a path toward degree completion in an area of their interest, while also allowing them to build on the academic credit earned at UDC and/or at academic institutions other than UDC. As would be expected, the Urban Sustainability degree is highly interdisciplinary, yet also offers sufficient content focus to prepare students for career success in the fast emerging sustainability field that cuts across virtually every career field including construction and building trades, law, health, planning, management, and a range of other fields.

B. The Program of Study

The proposed Meta-Major in Urban Sustainability, draws on existing courses in Architecture and Community Planning and Environmental Science. No new courses are needed to offer the proposed degree. The degree will be offered as a Bachelor of Arts degree option and will add a much needed major at the BA level. All other undergraduate degrees in CAUSES are BS degrees.

C. Feasibility

1. Demonstration of Need

Enrollment data suggests that UDC has one of the lowest graduation rates in the United States. It also indicates that UDC students frequently earn far more than the number of credit hours necessary to graduate. They lack, however, the right kind of credit hours to meet graduation

requirements in any one major area of study. While it is always preferable to advise students to graduate in a major that prepares them for success in a chosen career, sometimes the ability to graduate and to earn a bachelor's degree is a tremendous accomplishment in and of itself. Achieving a degree can boost a student's confidence and set the direction for future success.

The proposed Meta-Major in Urban Sustainability achieves both; it introduces the flexibility of a broad based degree option similar to a general studies or liberal studies major, and thus allows a student to meet graduation requirements even if their earned credit hours are not in one consistent field of study. It also allows a student to graduate with a broad based degree that communicates his/her chosen area of interest and career aspirations. Since the proposed major introduces a broad topical area and content focus in sustainability it accommodates both of these important aspects of student success and satisfaction.

The proposed major consists entirely of existing courses. As with any other major at UDC, the proposed courses in the major will be combined with the existing general education requirements for the BA degree. Selected existing courses in the general education core will provide students with the competencies expected of a bachelor degree graduate. The expected competencies are also consistent with the CAUSES student aspiration goals that apply to all CAUSES graduates regardless of their chosen major. CAUSES students will be:

- A. Global citizens committed to local relevance
- B. Adept at solving urban problems
- C. Committed to health & wellness and food & water security
- D. Skilled at navigating diverse social, cultural, built and natural environments
- E. Independent thinkers and collaborative team players; and
- F. Adaptive lifelong learners.

Examples of competencies and corresponding employment opportunities are summarized in table 1 below.

Table 1

| Urban Sustainability | Examples of competencies expected of bachelor degree graduate in Urban Sustainability | Employment Opportunities Some positions require graduates to take a national exam upon completion of the bachelor degree |
|--------------------------|---|--|
| Analytical skills | Graduate is able to utilize data to address scientific, political, ethical, and social public health issues. Graduate is able to carry out a wide range of laboratory and field tests that are accurate and precise. Demonstrate the ability to conduct research from a variety of sources. | <ul style="list-style-type: none"> • Environmental Scientist • Environmental Specialist • Environmental Health & Safety Specialist • Hazardous Substance Scientist |
| Critical-thinking skills | Reach conclusions through sound reasoning and judgment. Must have the ability to determine the best way to address urban environmental issues. | <ul style="list-style-type: none"> • Solar Photovoltaic Installer |
| Communication and | Ability to communicate in writing and | |

| | | |
|----------------------------|--|--|
| Interpersonal skills | orally, in person, and through electronic means that demonstrate language and cultural proficiency Ability to communicate in a variety of settings | <ul style="list-style-type: none"> • Environmental Protection Specialist • Environmental Project Manager • Environmental Impact Analyst • Registered Environmental Health Specialist • Urban Planner • Urban Development Analyst |
| Listening skills | Graduate is able to carefully and accurately follow instructions that will facilitate providing accurate and precise results of an experiment or field test. | |
| Cultural Competency skills | Graduate is able to explain the dynamic forces that contribute to cultural diversity and the built environment. Graduate is able to consider the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of urban and environmental health issues | |

2. Congruence

The proposed major in Urban Sustainability closes a gap in the UDC curriculum that puts UDC students at a distinct disadvantage. UDC currently does not offer a General Studies degree, or Liberal Studies degree that is generic enough to allow students to graduate even if they have earned academic credit in multiple fields. Many UDC students are transfer students who interrupted their academic studies, and who are returning to the university to complete a degree that they started, often many years prior, and often at a university other than UDC.

Students are often reluctant to choose a major that does not clearly communicate their career aspirations and interests. A liberal studies degree may not be a satisfactory option, especially for those students who wish to complete their degree in order to advance professionally or to reposition themselves in their chosen career field.

In order to complete their four-year degree in a timely manner these students need a flexible degree option also referred to as a Meta-Major. The proposed B.A. in Urban Sustainability provides this flexible degree option, and minimizes or eliminates the excessive number of credits students have to take to meet the necessary graduation requirements in any one major field of study. Many UDC students have more than the necessary credit hours to graduate, but they have not taken their courses in a consistent academic program and therefore cannot meet the graduation requirements in any specific major. This proposed major provides a path to graduation for a UDC student who has 150 or even 180 credit hours in course work, but may still not be able to graduate because the courses are spread across majors.

The proposed Urban Sustainability Meta-Major offers a solution to this persistent problem without duplicating the efforts of any one of the degree programs offered at UDC. The proposed major is broad enough to allow students to count a broader range of courses toward their major course of study. At the same time, the courses that constitute the major offer some common content to allow students to communicate their field of interest. The proposed major

thus meet the definition of a so called Meta-Major. The topical meta-major can be tremendously helpful to students and to the university in achieving higher students success rates, higher graduation rates, and higher student satisfaction by graduating students earlier and without an excessive number of credit hours earned.

3. Duplication and Overlap with Existing Programs

There is no duplication across programs and units within CAUSES or any of the other UDC colleges. On the contrary, the proposed Meta-Major fills a serious void that stems from the fact that the university currently does not offer an environmentally focused degree at the undergraduate level. In light of the tremendous interest in environmental and sustainability related fields, and the tremendous employment opportunities in the green jobs sector, this constitutes a serious omission. The proposed degree option is expected to produce strong student numbers and markedly improve student enrollment. Recent additions to the University's landgrant certificate programs in the field of Urban Sustainability and Green Jobs confirm strong interest in this area of study.

4. Relationship with Other Programs/Departments/Schools/Colleges

The proposed curriculum does not present a conflict with other UDC programs, departments, schools and colleges. It does, however, present many opportunities for interdisciplinary collaboration since the proposed meta-major in Urban Sustainability can be combined with a number of minors and concentrations. This combination of a meta-major and a minor or concentration (for example, Urban Sustainability and Environmental Science; or Urban Sustainability and Marketing) allows a student to indicate a more discipline specific focus of their course of study that aligns well with their career interests.

5. Accreditation Standards

The proposed General Studies Majors in Urban Health and in Urban Sustainability are not subject to accreditation standards. However, the proposed curriculum is in line with best practices standards in the health science and sustainable development fields respectively, as well as with best practices standards associated with the new meta-majors.

6. Number of Students

Historically, enrollment history in Environmental Science was small at UDC. At the same time, enrollment trends pointed to considerable growth potential. Between 2012 and 2014 enrollment increased from 3 to 19 Environmental Science majors. Interest in environmentally related fields has increased across the country and in the DC metro region. Recent experience in the University's landgrant programs confirms the robust interest in the field of sustainability and related fields. For example, a certificate program in urban agriculture that was launched in 2015 had 18 enrollees in its first semester, and 46 in its second semester. Interest in other certificates like rain garden design, water management, and related fields also continues to grow.

Courses like 'Introduction to Environmental Science' or "introduction to Urban Sustainability' that are currently offered enjoy consistently high enrollments, especially when they are cross listed at general education courses in Discovery Science.

This indicates significant growth potential for the proposed Urban Sustainability Major. Demand for Sustainable Development is on the increase nationwide and in the District of Columbia. Virtually every sector of the economy must address environmental quality and sustainability issues whether in the construction sector, the legal field, community planning, manufacturing or

the service sector. This indicates tremendous career opportunities for UDC graduates who obtain a degree in the field of Urban Sustainability as proposed with the new BA degree.

It is therefore expected that the new Meta-Major in Urban Sustainability will be in high demand and will have an enrollment of 100 students within three years of its launch.

7. Effect on Student Development/Employment/Program Effectiveness

The University of the District of Columbia will benefit from the proposed Meta-Major in two ways: (1) the proposed degree will improve UDC graduation rates by allowing more students who are currently enrolled at UDC to complete a bachelors degree within the four-year or six-year timeframe.(2) the proposed degree has tremendous growth potential and is expected to increase student enrollment at the undergraduate level by attracting new student to UDC.

The proposed degree also has a logical feeder program in the non-degree bearing workforce development programs that are offered through the land-grant centers in CAUSES. Feeder programs for the degree in Urban Sustainability are the low impact development certificate, the urban agriculture certificate and the lead abatement certificate.

8. Adequacy and Appropriateness of Current Faculty/Support Staff

The proposed majors will utilize only existing courses that are currently taught by tenured faculty members, qualified landgrant staff and adjunct faculty members. CAUSES has a sufficient number of qualified instructors that have the skills, expertise, experience and educational credentials to teach within the proposed Meta-Major.

The Meta-Major in Urban Sustainability will also provide a seamless transition to the new environmental studies major that is expected to be implemented by 2017 as outlined in the academic goals of the University's Strategic Plan, Vision 2020.

9. Adequacy of Current Facilities

Current facilities, including classroom and laboratory space are adequate and will accommodate the proposed Meta-Major in Urban Sustainability. There are no additional space requirements associated with the full implementation of the proposed major. It is expected that the new Urban Sustainability Major will require a modest amount of supplies and some transportation needs associated with fieldwork in some of the laboratory sections of the program. These anticipated expenses are in line with ordinary expense associated with operating an academic unit in CAUSES and are no different that the expenses associated with the current course offerings on which the proposed Meta-Major will draw. .

10. Estimated Costs/Funding Requirements

There are no new/additional costs or funding requirements.

11. Additional Needs

There are none. The proposed major in Urban Sustainability will not require any additional courses that are not already offered in CAUSES. The proposed degrees will draw on existing courses from architecture, environmental science, health education, and nutrition as outlined in table 2 below.

Operationally, the proposed Meta-Major in Urban Sustainability will be housed in the Department fo Architecture and Urban Sustainability in CAUSES..

12. Proposed date of Implementation of Modified Curriculum –

We had proposed to launch the BA in Urban Sustainability in the fall semester of 2015. However, due to reasons out of our control, this proved too ambitious of a timeline. We now anticipate a launch of the new degree in the fall of 2016.

D. Conclusion

The proposed Meta-Majors in Urban Sustainability will offer UDC students an important option among the four-year degree offerings of the University. The proposed Urban Sustainability degree will (1) improve UDC graduation rates by allowing more students who are currently enrolled at UDC to complete a bachelors degree within the four-year or six-year timeframe; (2) the proposed Urban Sustainability degrees will add career preparation in a high-demand field that constitutes a growth area in the DC metro region and across the nation and the world; and (3) the proposed Meta-Major in Urban Sustainability is expected to offer tremendous opportunities for enrollment growth at the undergraduate level by attracting new student to UDC.

The proposed BA degree in Urban Sustainability a logical feeder in the form of non-degree bearing workforce development programs offered through the landgrant centers for Urban Agriculture, Sustainable Development and the Architectural Research Institute in CAUSES.

The proposed Urban Sustainability Meta-Major will be especially beneficial for the transfer student population that UDC attracts. This student population brings to UDC a number of transfer credits from previous efforts to seek a four-year degree. These credits are not necessarily consistent with the specific graduation requirements for any of the majors currently offered at UDC. By offering a more flexible and general course of study, graduation rates at U DC can be meaningfully increased.

Respectfully submitted,

Susan Schaefer Kliman, PhD
Chair, Architecture and Urban Sustainability

B.A. in Urban Sustainability Program of Study

| | | |
|-----------------------------------|----------|-----------|
| 1st Semester | | |
| Foundation Writing I | IGED 110 | 3 credits |
| Foundation Quantitative Reasoning | IGED 120 | 3 credits |
| Foundation Oral Communications | IGED 130 | 3 credits |

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|----------------------------------|----------|-----------|
| 2nd Semester | | |
| Foundation Writing II | IGED 111 | 3 credits |
| Discovery Quantitative Reasoning | IGED 220 | 3 credits |

| | | |
|----------------------|----------|-----------|
| 3rd Semester | | |
| Foundation Ethics | IGED 140 | 3 credits |
| Discovery Technology | IGED 250 | 3 credits |
| Discovery Writing | IGED 210 | 3 credits |

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|---------------------|----------|-----------|
| 4th Semester | | |
| Discovery Science | IGED 260 | 4 credits |
| Discovery Diversity | IGED 270 | 3 credits |

| | | |
|-------------------------------------|--------------------------|-----------|
| 5th Semester | | |
| Discovery Civics | IGED 280 | 3 credits |
| Writing Intensive Course in College | Upon completion of Disco | 3 credits |

| | | |
|----------------------------------|------|-----------|
| 7th – 8th Semester | | |
| Frontier Capstone I & II | IGED | 3 credits |
| Total Credit Hours Gen Ed | | 40 |

| | | |
|--|----------------|-----------|
| 1st & 2nd semester (chose 4 or 5 courses) | | |
| Intro to History/Philosophy of Health Phys. | HLTH104 | 3 |
| Intro to Environmental Science Lec & Lab | ENSC-145 & 146 | 4 |
| World Physical Geography | GEOG-104 | 3 |
| Introduction to College Physics Lec & Lab | PHYS 101 & 103 | 4 |
| Basic Design & Communication I | ARCP-101 | 3 |
| Basic Design & Communication II | ARCP-102 | 3 |
| Architecture and Planning Graphics | ARCP-123 | 3 |
| Intro to Computer Technology I | ARCP-105 | 3 |
| Intro to Computer Technology II | ARCP-106 | 3 |
| Pre Calculus With Trigonometry I | MATH-113 | 3 |
| Pre Calculus With Trigonometry II | MATH-114 | 3 |
| Materials & Methods of Construction I | ARCP-114 | 3 |
| Materials & Methods of Construction II | ARCP-116 | 3 |
| Introduction to Nutrition Lec & Lab | FDSC104 & 106 | 4 |
| Intermediate Algebra I | MATH-105 | 3 |
| Total Credit Hours in Major - 1st Year | | 15 |

| | | |
|--|----------------|------------|
| 3rd & 4th semester (chose 4 or 5 courses) | | |
| Environmental Studies and Sustainability | ENSC 225 | 3 |
| Water Technology Lecture & Lab | ENSC 221 | 4 |
| General Ecology Lecture & Lab | ENSC 250 & 251 | 4 |
| Built Environment | ARCP-256 | 3 |
| Statics & Structural Design | ARCP-231 | 3 |
| Advanced Computer Simulations | ARCP-241 | 3 |
| Environmental Systems I | ARCP-244 | 3 |
| Environmental Systems II | ARCP-246 | 3 |
| Total Credit Hours in Major - 2nd Year | | 15 |
| 5th & 6th semester (chose 6 or 7 courses) | | |
| Sustainable Agriculture Lec & Lab | ENSC-352 | 4 |
| Urban Policy & Economy | URST-335 | 3 |
| Hydrology & Hydraulics Lec & Lab | CVEN-325 & 327 | 4 |
| History & Theory of Architecture I | ARCP-321 | 3 |
| History & Theory of Architecture II | ARCP-322 | 3 |
| Theory of Structures | ARCP-331 | 3 |
| Urban Sustainability | ENSC-357 | 3 |
| Environmental Health Lec&Lab | ENSC-450 & 451 | 4 |
| Business Ethics | BGMT-319 | 3 |
| Total Credit Hours in Major - 3rd Year | | 24 |
| 7th & 8th semester (chose 8 or 9 courses) | | |
| Air Pollution and Climate | ENSC 445 | 3 |
| Thermodynamics and Economics | ENSC 415 | 3 |
| Professional Ethics & Practice | ARCP-411 | 3 |
| Preservation Rehabilitation Technology I | ARCP-412 | 3 |
| Professional Ethics & Practice II | ARCP-414 | 3 |
| Design of Steel Structures | ARCP-332 | 3 |
| Design of Concrete Structures | ARCP-432 | 3 |
| Special Topics in Computer Science | CSCI-490 | 3 |
| Urban Environment & Information Systems | GEOG-475 | 3 |
| Hydrodynamics & Water Quality | ENSC-459 | 3 |
| Research Methods | ENSC-456 | 3 |
| Advanced GIS | GEOG-470 | 3 |
| Urban Policy Analysis | URST-405 | 3 |
| Climate Change & Carbon Analysis | ENSC-460 | 3 |
| Environmental Policy | ENSC-461 | 3 |
| Environmental Field Problems | ENSC-448 | 3 |
| Total Credit Hours in Major - 4th Year | | 26 |
| Total Credit Hours | | 120 |