Report of the Committee on Educational Policy and the Curriculum

**To be presented at the April 26, 2019 meeting of the Faculty of Arts & Sciences
(Information is from the April 18, 2019 CEPC meeting)**

Recommendations for approval to the Faculty of Arts and Sciences

The full text of syllabi, program descriptions, Undergraduate Record, as well as other documentation for these recommendations, are available prior to the FAS meeting in the office of the College Registrar, 106 Monroe Hall. Changes approved by the FAS will appear and become effective in the Fall 2019-2020 Undergraduate Record, unless otherwise noted.

The Committee recommends adoption of the following new courses.

NEW COURSE PROPOSALS

CLASSICS DEPARTMENT

To add to the Undergraduate Record

      LATI 4020 Seminar in Vergil

DRAMA DEPARTMENT

To add to the Undergraduate Record

      DRAM 1220 Art of the Creature

GERMAN LANGUAGE & LITERATURE DEPARTMENT

To add to the Undergraduate Record

      GETR 3392 Fairy Tales

INTERDISCIPLINARY – GLOBAL STUDIES

To add to the Undergraduate Record

      GSVS 3010 Sustainable Design Thinking

INTERDISCIPLINARY-MEDIA STUDIES PROGRAM

To add to the Undergraduate Record

MDST 3661 Media Bodies

MIDDLE EASTERN AND SOUTH ASIAN LANGUAGES AND CULTURES DEPARTMENT

To add to the Undergraduate Record

ARTR 3450 Global Masterpieces from the Classical Islamicate World

RELIGIOUS STUDIES DEPARTMENT

To add to the Undergraduate Record

RELC 3155 Christianity and Ecology

SPANISH, ITALIAN and PORTUGUESE DEPARTMENT

To add to the Undergraduate Record

PORT 2050 Intensive Portuguese for Speakers of Spanish and other Romance Languages

WOMEN, GENDER AND SEXUALITY DEPARTMENT

To add to the Undergraduate Record

WGS 4430 Gender & Nationalism in Middle East

INTERDISCIPLINARY – COMPUTER SCIENCE PROGRAM

To propose revisions to the CS Major requirements

Overview: The goal of the BA degree in Computer Science (BACS) is to educate students so they can develop a deep understanding of computing and critical thinking skills that will allow them to pursue a wide variety of possible careers, including an opportunity to become academic, cultural, and industrial leaders in areas that integrate the arts and sciences with computing.

Computer Science is the study of information processes. Computer scientists learn how to describe information processes, how to reason about and predict properties of information processes, and how to implement information processes elegantly and efficiently in hardware and software. The Computer Science curriculum concentrates on developing the deep understanding of computing and critical thinking skills that will enable graduates to pursue a wide variety of possible fields and to become academic, cultural, and industrial leaders. The core curriculum focuses on developing methods and tools for describing, implementing, and analyzing information processes and for managing complexity including abstraction, specification, and recursion. Computing connects closely with a wide range of disciplines including, but not limited to, the visual arts, music, life sciences including biology and cognitive science, the physical sciences, linguistics, mathematics, and the social sciences. The Computer Science major provides students with a strong foundation in computer science, combined with courses in arts, humanities, and sciences, in order to develop broad understanding of other areas and their connections to computing.

Faculty: The Computer Science department has fifty-one faculty members. Our faculty is strongly committed to teaching as well as conducting world-class research. Faculty interests span major areas of computer science with particular strengths in algorithms, artificial intelligence, computer architecture, computer vision, cyber-physical systems, machine learning, programming languages, security, sensor networks, software engineering, and theory.

Computer Science (B.A.)

Prerequisites

To be accepted into the major, students must satisfy the following pre-requisites. Coursework used to satisfy these must have a grade of C+ or higher.

- An introductory computer science course, such as CS 1110, CS 1111, CS 1112, CS 1113 or CS 1120.

- CS 2110, Software Development Methods, or an equivalent.

Declaring the Major and Application Process

In recent years, there has been a rapid growth in demand for computing classes at UVA and other universities. In the last few years, the department has been able to accept all qualified students who wanted to declare the major. But we do have an application process in case demand were to increase beyond our capacity to serve our majors.

If resources are inadequate to satisfy student interest in a given year, a selective admissions process will be used to evaluate applications to declare the BACS. The primary (but not only) criterion for admission is evidence that a student will be able to complete our computing curriculum in a timely manner. (This includes grades in completed CS coursework.) Secondary criteria reflect the mission, values and goals of both the University as a whole and the Department in particular, including our goal to develop graduates who will become effective contributors, collaborators, innovators, or leaders in the profession and society.

Applications are completed in the spring semester (normally the student's fourth semester). Students complete an online application that typically is available in January. Information about the process and deadlines is posted on the departmental website and publicized in other ways.

Due to prerequisite dependencies, it is difficult for students who have not completed CS 2110 by the end of their third year to complete the major in their four remaining semesters. Ability to complete the degree in a timely manner is a factor in acceptance into the major.

Second Majors: College of Arts and Sciences students who wish to declare the BACS as a second major must follow the application process described here. Only College of Arts and Sciences students are eligible to apply for the BACS degree as a second major.

Transfer Students from Outside the University: Students transferring into the University from other institutions must apply to the department to be allowed to declare the BACS major. Applications will be considered the summer before a transfer student begins classes, and the application process will be discussed during the summer orientation session. If an incoming transfer does not attend summer orientation, they must meet with a CS advisor before classes begin to discuss applying.

Transfer students who have not completed the degree's pre-requisites (CS 1110 or equivalent and CS 2110, with grades of C+ or higher) before their first semester in residence cannot be accepted into the major. Due to prerequisite dependencies, it is difficult for third-year students who have not completed CS 2110 or its equivalent to complete the BACS in the four remaining semesters. It is important that students transferring to the University as third-years complete the equivalent of CS 2110 before coming to UVA. In exceptional cases, students in this situation may apply for the major, but the ability to complete the degree in a timely fashion is one factor that will determine if you are accepted into the degree program.

Requirements for the Major

To complete the BA in Computer Science, students must satisfy the pre-requisites, then complete 27 credits of CS coursework as well as 12 credits of related non-CS coursework as described below:

Pre-requisites: As noted earlier, to be accepted into the major, students must satisfy these pre-requisites. To be accepted into the major, courses used to satisfy these must have a grade of C+ or higher.

- An introductory computer science course, such as CS 1110, CS 1111, CS 1112, CS 1113 or CS 1120.

- CS 2110, Software Development Methods, or an equivalent course.

Required CS courses (15 credits):

- CS 2102, Discrete Mathematics

- CS 2150, Program and Data Representation

- CS 3330, Computer Architecture

- CS 4102, Algorithms

- One of the following four courses: CS 3102 (Theory of Computation), CS 3240 (Advanced Software Development), CS 4414 (Operating Systems), or CS 4610 (Programming Languages)

CS elective courses (12 credits): These are CS courses at the 3000-level or above, in addition to the required courses listed above. At most 3 credits of CS 4993 (Directed Independent Study) can be counted towards this requirement.

Integration Electives (12 credits): These are non-CS courses that contribute to this program of study by exploring applications of computing to arts and sciences fields in a significant way or by providing fundamental computing depth and background. Integration electives are courses offered by departments in the College of Liberal Arts and Sciences. The list of approved courses is available on the department website at

the link below:

https://engineering.virginia.edu/departments/computer-science/academics/computer-science-undergraduate-programs/ba-computer-science#accordion67813

Distinguished Majors Program

Distinguished majors complete the B.A. degree requirements in addition to a fourth year thesis project that is approved by two advisors, typically one from Computer Science and one from Arts and Sciences. Both advisors must approve the student's plan of study, thesis proposal, and thesis report. For more information regarding the Distinguished Major Program, please visit https://engineering.virginia.edu/departments/computer-science/academics/computer-science-undergraduate-programs/ba-computer-science#accordion67814.

Requirements for the Minor

The department can only allow a limited number of SEAS students to declare a minor in Computer Science due to a rapidly growing demand for computing courses. The CS department continues to work with the university to obtain resources that will allow more students to declare the Computer Science minor. Students outside of SEAS who are able to complete all of the requirements for the CS minor are able to submit the minor request form in the semester in which they complete the remaining requirement(s).

The Computer Science minor consists of six courses: one of the introductory courses (CS 1110, CS 1111, CS 1112, CS 1113, or CS 1120); CS 2110; CS 2102; CS 2150; and two 3000-level or higher CS electives.

Additional Information

For more information, contact Tina Hittinger, Senior Student Services Coordinator, Department of Computer Science, 85 Engineer's Way, P.O. Box 400740, Charlottesville, Virginia 22904-4740; Phone: 434-924-9392, Fax: 434-982-2214; t-rex@virginia.edu.

Course Descriptions

Descriptions of Computer Science courses appear in the School of Engineering and Applied Science section.

- CS 1010 - Introduction to Information Technology

- CS 1110 - Introduction to Programming

- CS 1111 - Introduction to Programming

- CS 1112 - Introduction to Programming

- CS 1113 - Introduction to Programming

- CS 1120 - Introduction to Computing: Explorations in Language, Logic, and Machines

- CS 1501 - Special Topics in Computer Science

- CS 1511 - Special Topics in Computer Science

- CS 2102 - Discrete Mathematics

- CS 2110 - Software Development Methods

- CS 2150 - Program and Data Representation

- CS 2190 - Computer Science Seminar

- CS 2330 - Digital Logic Design

- CS 2501 - Special Topics in Computer Science

- CS 2910 - CS Education Practicum

- CS 2993 - Independent Study

- CS 3102 - Theory of Computation

- CS 3205 - HCI in Software Development

- CS 3240 - Advanced Software Development Techniques

- CS 3330 - Computer Architecture

- CS 3501 - Special Topics in Computer Science

- CS 4102 - Algorithms

- CS 4240 - Principles of Software Design

- CS 4330 - Advanced Computer Architecture

- CS 4414 - Operating Systems

- CS 4434 - Dependable Computing Systems

- CS 4444 - Introduction to Parallel Computing

- CS 4457 - Computer Networks

- CS 4458 - Internet Engineering

- CS 4501 - Special Topics in Computer Science

- CS 4610 - Programming Languages

- CS 4620 - Compilers

- CS 4630 - Defense Against the Dark Arts

- CS 4640 - Programming Languages for Web Applications

- CS 4710 - Artificial Intelligence

- CS 4720 - Mobile Application Development

- CS 4730 - Computer Game Design

- CS 4740 - Cloud Computing

- CS 4750 - Database Systems

- CS 4753 - Electronic Commerce Technologies

- CS 4760 - Network Security

- CS 4810 - Introduction to Computer Graphics

- CS 4970 - Capstone Practicum I

- CS 4971 - Capstone Practicum II

- CS 4980 - Capstone Research

- CS 4993 - Independent Study

- CS 4998 - Distinguished BA Majors Research

To seek the transition from an Interdisciplinary – Computer Science degree to a "stand-alone" degree

I am the DUP for the BA Degree in Computer Science (BACS). On behalf of the BACS Committee that administers this interdisciplinary degree program, this year we are submitting two proposals for the CEPC's consideration. In a separate letter and submission, we requested changes to the degree requirements for the BACS interdisciplinary degree that would be in effect for students admitted to this program in August 2019 or later.

This letter seeks approval of this degree (as modified by the first proposal) to transition from an interdisciplinary degree to a "stand-alone" degree. This transition has been requested by the Provost's office and the Deans of the College and Engineering. The BACS was approved by the College as an interdisciplinary degree and graduated its first students in 2006-2007. Since that time it has been very successful in many ways. Students have excelled in industry careers and graduate degrees. The degree has gained popularity, and graduated around 180 students in 2017-2018. However, the program has been recognized as one which should no longer be an interdisciplinary degree. There are many reasons for this, including the fact that its graduates are not counted as STEM or computing majors when the university reports such data to external entities. For these and other reasons, the Provost's office initiated discussions last fall with me and the College Deans who assist with the program (Rachel Most and John Hawley), and we agreed to begin this process. Since then, the Dean of Engineering has also become aware of this situation and requested that we move through the process to get full approval by the College, the University, and SCHEV as soon as possible. We propose that the degree requirements for this new manifestation of the BACS be the requirements that were submitted in the first proposal I have sent the CEPC (which modified the current requirements of the interdisciplinary degree). For this reason, I am submitting only a clean copy of those requirement, under the assumption that the changes to the current version will be evaluated when the first proposal is reviewed.

We do not seek to modify the current model for administering this degree. The BA Computer Science degree is administered by a joint Computer Science BA Committee which is appointed by the CLAS Dean and Computer Science Department. The BA Committee is responsible for the curriculum and administration of the program, with a DUP appointed through a joint agreement between the chair of the CS department and the College Dean.

Thank you for your consideration of this request.
Yours sincerely,

Thomas B. Horton
Director, BACS Program
Associate Professor and Associate Chair

For the members of the BACS Committee:
Jim Cohoon (Computer Science)
Kevin Driscoll (Media Studies)
David Evans (Computer Science)
John Hawley (Dean's office, Astronomy)
Jeff Holt (Statistics and Math)
Robbie Hott (Computer Science)
Worthy Martin (Computer Science)
Rachel Most (Dean's office, Anthropology)
Denis Nekipelov (Economics)
Per Sederberg (Psychology)

INTERDISCIPLINARY – ENVIRONMENTAL THOUGHT AND PRACTICE PROGRAM

To propose revisions to the ETP Major requirements (CEPC requested that course list be cleaned up, and to change requirements to require 4 courses at the 3000-level)

Requirements for the Major
The Environmental Thought and Practice interdisciplinary major requires five core classes and seven electives.
Core courses
The following core courses are required of all majors.
A shared introductory course
EVSC 2030/ETP 2030/PLAP 2030 Politics, Science, and Values: Introduction to Environmental Policy (fall only)

I. Values, Culture, and History (one class)
Either RELG 2210 (Religion, Ethics, & Global Environment), HIST 2150 (Global Environmental History) or ANTH 2260 (Culture and the Environment)

II. Policy, Planning, and Society (one class)
Either ECON 2010 Microeconomics, ETP/PLAP 4800 (Politics of the Environment) or GSVS 2150 (Global Sustainability)

III. Natural Science (one class)
Either EVSC 1010 (Introduction to Environmental Science), EVSC 1450 (Climate, You and CO_2), EVSC 2200 (Plants, People and Culture) or EVSC 2220 (Conservation Ecology: Biodiversity and Beyond)

A shared final course
ETP 4010 Environmental decisions (majors only, taken in spring of 4th year) (spring only)

Electives
Each student must also choose six (6) classes distributed across the three areas indicated below, with the restriction that at least two (2) classes must be taken in Area III (Natural Sciences) and at least one (1) class must be taken in each of Areas I and II. We recommend checking SIS frequently for environmentally-themed courses, as courses often come and go. Students who wish to have classes not specified here counted against their ETP elective requirements must submit their request plus the full course syllabus to Professor Lawrence. Please give this information to Professor Lawrence by email. ETP elective courses must be upper-level or graduate three- or four-credit classes and they must have environmental concerns as the central focus. Requests to count courses that do not meet these basic requirements will not be considered.

I. Values, Culture, and History
Students may fulfill their one-class requirement for this track by taking any one of the following specific 3-credit classes. If approved by one of the ETP Program Directors,

students may count one related 3-credit 3000-, 4000-, or 5000-level class in History, Anthropology, Philosophy, English, Religious Studies, Landscape Architecture, or Science, Technology, and Society to meet the overall six-course elective requirement, but not to meet the basic one-class requirement for this area. The College allows students to count 18 credits of classes in other schools toward the 120-credit graduation requirement.

AAS 3250 - MotherLands: Landscapes of Hunger, Futures of Plenty
AMST 2711 - American Environmental History
ANTH 3100 - Indigenous Landscapes
ANTH 2850 - American Material Culture
ANTH 2890 - Unearthing the Past
ANTH 3130 - Disease, Epidemics and Society
ANTH 3240 - The Anthropology of Food
ANTH 3340 - Ecology and Society: An Introduction to the New Ecological Anthropology
ANTH 3580 - Science and Culture
ANTH 3685 - Austronesia: World of Islands
ANTH 3870 - Archaeology of Virginia
ANTH 3880 - African Archaeology
ANTH 3885 - Archaeology of Europe
ANTH 3890 - Archaeology of the American Southwest
ANTH 4060 - People, Culture and Environment of Southern Africa
ANTH 5590 - The Nature of Nature
ENAM 3160 - Realism and Naturalism in America
ENAM 4500 - American Natures
ENMC 3500 - Jungle Stories
ENSP 3559 - Plants and Empire
ENSP 3500 - Climate Fiction
ETP 2020 - Global Sustainability
ETP 3220 - Uranium and the American West
ETP 3870 - Framing the Environment: Literary, Critical, and Philosophical Responses to Nature
ETP 4810 - Class Race & the Environment
HIAF 3112 - African Environmental History
HILA 4511 - Environmental History of Latin America
HIST 2210 or GSGS 2210 - Epidemics, Pandemics, and History
HIUS 2711 - American Environmental History
HIST 3112 - Ecology and Globalization in the Age of European Expansion
HIST 4501 - Modern Environmental History
HIST 4501 - Water, Development, Global History
IHGC 5559 - The Moral Ecology of Food
ITTR 3559 - Narrating (Un)-sustainability
MDST 3584 - Screening Nature
MDST 4210 - Global Environmental Media
MESA 3110 - Sustainable Environments Middle East and South Asia (Spring 19) Farmer
MUSI 3400 - Eco-Acoustics
PHIL 2500 - Environmental Ethics
PHIL 2500 - Animal Minds
PHIL 3652 - Animals and Ethics

PHYS 1090 - Galileo and Einstein
PSYC 3559 - The Science of Well-Being
RELG 3559 - Sustainability & Asceticism
RELC 3795 - Theology, Spirituality and Ethics of Sustainability
RELG 3820 - Global Ethics & Climate Change

II. Policy, Planning, and Society
Students may fulfill their one-class requirement for this track by taking any one of the following specific 3-credit classes. If approved by one of the ETP Program Directors, students may take one related 3-credit 3000-, 4000-, or 5000-level course in Economics, Government and Foreign Affairs, Sociology, Statistics, McIntire School of Commerce, Batten School of Leadership and Public Policy, Engineering, the Law School, Darden, or Urban and Environmental Planning to meet the overall six-course elective requirement, but not to meet the basic one-class requirement for this area.
ECON 4430 - Environmental Economics
ECON 3559 - Economics of Sustainability and the Environment
ETP 3220 or CHEM 3220 - Uranium and the American West
ETP 3860 - The Business of Saving Nature
ETP 4810 or PLAP 4810 - Class, Race, and the Environment
EVSC 4030 - Environmental Policymaking in the United States
EVSC 4040 - Climate Change: Science, Markets & Policy
EVSC 3020 - GIS Methods
EVSC 4070 - Advanced GIS
PLAD 2500 - Politics, Poverty and Health
PLAP 3160 - Politics of Food
PLAP 4500 - GIS in the Social Sciences
PLCP 4500 - Politics of Air Pollution
PLCP 3500 - Environmental Politics in China
SOC 2630 - Environment & Society

III. Natural Science
Two 3000-, 4000- or 5000-level 3-credit courses in Environmental Sciences or one 3-credit course at the 3000- 4000- or 5000-level in Environmental Sciences plus a second course from the following list. If approved by one of the ETP Program Directors, students may take one related 3000-, 4000-, or 5000-level class in Biology, Chemistry, or Environmental Engineering to meet the overall six-class elective requirement, but not to meet the basic two-class requirement for this area. (Note: upper-level Biology, Chemistry, Environmental Sciences and Environmental Engineering classes can have several prerequisites.)
BIOL 3450 - Biodiversity and Conservation
BIOL 3020 - Evolution and Ecology
BIOL 4090 - Environmental Public Health
BIOL 3660 - Marine Biology and Coral Reef Ecology in San Salvador
EVSC 2800 - Fundamentals of Geology
Distinguished Majors Project (DMP)
Majors with a minimum 3.6 GPA in the major (and 3.4 GPA overall) are eligible for a distinguished majors program (DMP) for their fourth year. DMPs take a year-long independent study with a faculty advisor, with the goal of producing a thesis that is

evaluated by outside readers. To participate in the ETP distinguished majors program, set up an appointment with Professor Lawrence during the spring semester of your third year.

Credit/No Credit Grades
Please note that the ETP program adheres strictly to the College of Arts and Science's policy regarding classes taken for CR (credit) or NC (no credit). Courses counting towards the ETP area requirements and core courses may NOT be taken on a CR/NC basis. The College does not permit students to take courses on a CR/NC basis in interdisciplinary programs, nor does it permit students to count courses taken on a CR/NC basis towards a major, minor, or College area requirements.

Double Majors/Minors
Many ETP majors pursue double majors and minors in a variety of other subjects. Please read the requirements about double majoring and minoring set forth by the College of Arts and Sciences.

Study Abroad
The ETP program does not have any official positions on overseas programs. We also recommend that ETP students interested in studying abroad go to other universities' websites for ETP-like majors and see if there are recommended programs through those universities. In the course approval process, students must go to the UVa departments for which they seek credit. For example, if you would like credit for a civil engineering class taken abroad, you must go to the Engineering Department to file for this credit. Unless it is an ETP course, we cannot approve it for credit.

Additional Information
For more information contact:
Deborah Lawrence, Clark Hall, P.O. Box 400123, Charlottesville, VA 22904-4123, dl3c@virginia.edu

INTERDISCIPLINARY – GLOBAL STUDIES PROGRAM

To add a new "track" to the Interdisciplinary Global Studies Program ~ Global Commerce in Culture and Society

Additions and changes are shown below in yellow highlighting:

Global Studies is an interdisciplinary major composed of <mark>six</mark> concentrations or tracks:
- **Global Development Studies** is an undergraduate interdisciplinary program with a focus on social justice, sustainable economic development, public health, global interconnection, and public service
- **Global Public Health** explores the cultural, social, political, economic, and environmental conditions, factors and pathways that affect health, health care, access, and quality of life around the world.
- **Environments & Sustainability** prepares students to understand the physical environment and to transform it in sustainable ways.
- **Security & Justice** allows students to explore both empirical and ethical aspects of conflict in the world today.
- **Middle East & South Asia** explores the complex cultural, historical, literary, and political context of the Middle East and South Asia, marrying the depth of perspective gained from sustained attention to particular world areas (MESALC) with the Global Studies Program's distinctive attention to critical global inquiry.
- <mark>**Global Commerce in Culture and Society** examines the social, cultural, and historical dimensions of business, trade, finance, organizations, property systems, and work.</mark>

[The rest of the Global Studies page remains as is, with the new track added at bottom:]

Requirements for the Global Commerce in Culture and Society Track

The Major in Global Commerce in Culture and Society requires 30 total credits plus two prerequisite courses and language competency as defined below.

1. Pre-requisites (6 credits)
• 1 course in ANTH or SOC
• ECON 2010, 2020, or 3010

2. Core Courses (12 credits)
• GCCS 3010, Global Commerce in Culture and Society (3 credits)
    • To be taken in the first semester of the student's third year
• 1 core course in Social and Cultural Analysis, such as ANTH 2120 The Concept of Culture, ANTH 2250 Nationalism, Racism, and Multiculturalism, ANTH 2400 Language and Culture, SOC 2320 Gender and Society, SOC 3056 Culture and Power, SOC 3410 Race and Ethnic Relations; titles and course numbers vary from semester to semester

- 1 core course in Political Economy, such as ANTH 2285 Anthropology of Development and Humanitarianism, ANTH 3220 Economic Anthropology, ANTH 3325 Capitalism: Cultural Perspectives, GSGS 3112 Global Perspectives on Corruption, SOC 2442 Systems of Inequality, SOC 2900 Economy and Society, SOC 3480 Sociology of Globalization, SOC 3710 Organizations, Institutions, Markets; titles and course numbers vary from semester to semester
- GCCS 4991, Fourth-Year Seminar
  - To be taken in the second semester of the student's fourth year
  - Each student will complete a major research paper

3. Methodologies Courses (6 credits)
- Two courses in Business and Professional Writing, Statistics, Accounting, Quantitative Analysis, or Computer Programming; titles and course numbers vary from semester to semester. ENWR 2XXX Business and Professional Writing [to be created] is recommended.

4. Electives (12 credits)
- 4 SOC, ANTH, HIXX or other College courses to be chosen in consultation with an advisor, who will help the student put together a suite of courses that will give the student background on a topic or geographic area to be pursued as a research project culminating in the research paper for GCCS 4991. Two of these courses must be at the 3000-level or above.

5. Language Competency
- 1 course beyond the 2020-level of a language taught at UVA (or in an approved study abroad program). This requirement can also be fulfilled by fluency in a world language other than English.
-OR-
- If a student has reached the 2020 level in one language but does not want to go further with that language, the student can satisfy the requirement by studying a second language and reaching the 1020 level.

For additional information, contact Professor Richard Handler, GCCS Track Director, Global Studies Program, PO Box 400772, Charlottesville, VA 22904; (434) 982-2166; rh3y@virginia.edu; http://globalstudies.virginia.edu/

Faculty associated with the program include Ira Bashkow, Fred Damon, Richard Handler, James Igoe, George Mentore, China Scherz, Sylvia Tidey, Kathleen Weston of Anthropology; Fahad Bishara, Herbert Braun, Justene Hill Edwards, Andrew Kahrl, Sarah Milov, Brian Owensby, David Singerman, Mark Thomas of History; Lana Swartz of Media Studies; Tessa Farmer, Geeta Patel of Middle Eastern and South Asian Languages and Cultures; and Jenn Bair, Elizabeth Gorman, Fiona Greenland, Katya

Makarova, Simone Polillo, Allison Pugh, Milton Vickerman, Yingyao Wang of Sociology.

[Note on Admissions: Like other GS tracks, admission to GCCS will be by application with students applying in the Spring of their 2nd year. The application will include a personal statement (essay), resume, and transcript, but no letters of recommendation (to avoid adding unnecessarily to faculty work). As part of the application, Each student will be asked to declare two geographical regions of specialization (U.S. can be one of these)]

To propose minor revisions to the Neuroscience Major

Interdisciplinary Major in Neuroscience

A major in Neuroscience provides a broad background in Neuroscience, ranging from Psychology related Neuroscience to Molecular/Cellular Neuroscience. Courses are offered within the Major, and as well in the Departments of Psychology and Biology. Many students perform independent research in laboratories throughout the University as well as in the School of Medicine. Students are admitted to the major with the expectation that they will proceed to the Distinguished Majors Program.

Requirements to Apply for the Major

Applications for the NESC major are typically accepted during the student's 4th semester at UVA. Transfer students may apply during the summer after they are admitted to UVA and prior to their third year. (See below for a list of UVA courses that fulfill the NESC prerequisites, which may be substituted by AP credits, or equivalent courses via transfer credit.) In addition, it is expected that students will have initiated neuroscience-related research within a research laboratory at the time of admission,

Requirements for Graduating with BA degree in Neuroscience

Thirty credits are required for the major in neuroscience and students must maintain at least a 2.500 GPA in the major courses and a grade of C+ or better in these courses. Students are dropped from the major if they fall below a cumulative GPA of 2.500 for all designated neuroscience courses. Students are required to take designated capstone neuroscience courses NESC 3980 and 3985, and at least one neuroscience core course. In addition, at least three courses at the 4000 or 5000 level from neuroscience-designated courses, designated 'Upper level courses', offered from the Department of Biology or the Department of Psychology, are required (a list of designated courses follows). The courses of research and distinguished major thesis do not count toward the 30 credits for the major.

Distinguished Majors Program in Neuroscience

Students with superior academic performance and serious commitment to independent research are encouraged to apply for the Distinguished Major Program (DMP) after their first year in the Program. The Program culminates in writing a thesis of empirical research done under the mentorship of a faculty member in the NGP. The requirements for admission to the DMP are:

1. Satisfaction of all College requirements as stated in this record with a cumulative GPA of at least 3.400 in the student's College and university courses;
2. A GPA of at least 3.400 in all courses taken as part of the Neuroscience major;
3. A brief (1-2 page) project proposal along with a written endorsement of the project by a faculty member of the Neuroscience Graduate Program.

To gain admission to the DMP, students submit a research proposal to the NUP Director with an outline of their proposed research project and including the names of the primary (i.e., research mentor) and secondary faculty readers. Once admitted, students register for NESC 4970 in the first semester of the fourth year. In this course, students conduct their research under the supervision of an NGP faculty member. In the second semester, students register for NESC 4980 to finalize the thesis, ending with a journal-style manuscript. The research project is intended to foster independent thought and develop the student's critical ability to formulate and conduct scientific research. The date of the student's final submission of the DMP thesis to the committee is two weeks before the last day of classes. The two-member faculty committee (mentor and second reader) reports its evaluation of Distinction, High Distinction, or Highest Distinction of the thesis to the NUP Director by the first day of the exam period. The executive committee of the major then considers the thesis evaluation, along with the student's academic record to submit a final level of distinction to the College Registrar. Students receive a letter grade for both NESC 4970 and NESC 4980. These courses do not count toward the 30 credit requirement for the major.

For further information on entering the Distinguished Major Program in Neuroscience, contact the current program and DMP director by email: psy-neuro@virginia.edu

Courses Required for a Major in Neuroscience

A total of 30 graded course credits is required to graduate.
In order to apply to the program students must be enrolled in, or have already completed the following prerequisite courses and have a C+ or better in all courses to apply for the major.

1. BIOL 2100 - Introduction to Biology with Laboratory: Cell Biology & Genetics
2. CHEM 1410 - Introductory College Chemistry I or CHEM 1610 - Introductory Chemistry I for Engineers orCHEM 1810 - Principles of Chemical Structure (Accelerated)
3. CHEM 1420 - Introductory College Chemistry II or CHEM 1620 - Introductory Chemistry II for Engineers or CHEM 1820 - Principles of Organic Chemistry (Accelerated)
4. CHEM 1411 - Introductory College Chemistry I Laboratory or CHEM 1611 - Introductory Chemistry I for Engineers Laboratory or CHEM 1811 - Principles of Chemical Structure Laboratory (Accelerated)
5. CHEM 1421 - Introductory College Chemistry II Laboratory or CHEM 1621 - Introductory Chemistry II for Engineers Laboratory or CHEM 1821 - Principles of Organic Chemistry Laboratory (Accelerated)
6. MATH 1210 - A survey of Calculus I or MATH 1310 - Calculus I (MATH 1310 is strongly recommended)
7. BIOL 3050 - Introduction to Neurobiology or PSYC 2200 - A Survey of the Neural Basis of Behavior

Note: *BIOL 3050, and PSYC 2200 count toward the 30 required credits for the major, but the Chemistry and Math prerequisites do not count toward the 30 major credits. Up to two CHEM requirement courses can be substituted with other 1000 or 2000 level courses offered in Physics, Statistics, Engineering or Computer Science departments, demonstrating student's strength in basic sciences that are relevant to neuroscience. However, substitute courses should be discussed with the director prior to applying to the program. If a prerequisite is in progress at the time of admission to the Neuroscience Major, admission will be considered provisional until receipt of final grades.*

Neuroscience Major Core Courses.
The following courses are required for the major and count toward the 30 credits requirement.

1. BIOL 3000 - Cell Biology
2. At least one of the following courses:
    A. PSYC 4200 - Neural Mechanisms of Behavior
    B. BIOL 4310 - Sensory Neurobiology
    C. BIOL 4280 - The Genetic Basis of Behavior

D. NESC/PSYC/BIOL 4265 Developmental Neurobiology
3. NESC 3980, 3985 - Current Topics in Neuroscience I, II (required of all 3rd year majors)

Upper Level Courses At least three courses at the 4000 or 5000 level from neuroscience-designated courses (see approved courses list below), with at least one each from the Department of Biology and one from the Department of Psychology, are required.

The remainder of required 30 credits will be obtained as electives from the courses listed as Neuroscience Approved Courses below.

Neuroscience Approved Courses

The following is a list of designated courses offered on a regular basis; this list is revised every semester to include newly offered courses.

Neuroscience

- NESC 3980 - Current Topics in Neuroscience I Credits: 3
- NESC 3985 - Current Topics in Neuroscience II Credits: 3
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  Following are Research and DMP courses that do not count toward 30 credits:
- NESC 3960 - Research in Neuroscience Credits: 3
- Two semesters taken by 3rd year majors.

- NESC 3995 - Research in Neuroscience Credits: 3
- NESC 4995 - Research in Neuroscience Credits: 3
- Research in Neuroscience for non-majors. Two semesters may be taken per year.

- NESC 4970 - Distinguished Majors Thesis Credits: 3
- DMP Thesis research. Taken fall semester by DMP majors.

- NESC 4980 - Distinguished Majors Thesis Credits: 3
- DMP Thesis research and writing. Taken spring semester by DMP majors.

Biology

- BIOL 3000 - Cell Biology Credits: 3
- BIOL 3010 - Genetics and Molecular Biology Credits: 3
- BIOL 3050 - Introduction to Neurobiology Credits: 3
- BIOL 3710 - The Biology of Stress
- BIOL 3410,3420 - Animal Physiology Credits: 3

- BIOL 3250 - Introduction to Animal Behavior Credits: 3
- BIOL 4050 - Developmental Mechanisms of Human Disease Credits: 3
- BIOL 4080 - Neuronal Organization of Behavior Credits: 3
- BIOL 4120 - When Good Cells Go Bad Credits: 3
- BIOL 4190 - Biological Clocks Credits: 3
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- BIOL 4260 - Cellular Mechanisms Credits: 3
- BIOL 4265 - Developmental Neurobiology- (cross listed as NESC/PSYC 4265)
- BIOL 4270 - Animal Behavior Laboratory Credits: 3
- BIOL 4280 - The Genetic Basis of Behavior Credits: 3
- BIOL 4310 - Sensory Neurobiology Credits: 3
- BIOL 4320 - Signal Transduction: How cells talk to each other Credits: 3
- BIOL 4340 - Experimental Foundations of Neurobiology Credits: 3
  BIOL 5070- Practical Aspects of Light Microscopy

Psychology

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*   PSYC 2200 - A Survey of the Neural Basis of Behavior Credits: 3
*   PSYC 3210 - Psychobiology Laboratory Credits: 3
*   PSYC 4200 - Neural Mechanisms of Behavior Credits: 3
*   PSYC 4245: Development of Sensory Systems (NEW)
*   PSYC 4250 - Brain Systems Involved in Memory Credits: 3
*   PSYC 4265 Developmental Neurobiology (Cross listed with NESC)
*   PSYC 4290 Memory Distortions Credits: 3
*   PSYC 5265 - Functional Neuroanatomy Credits: 3
*   PSYC 5326 - The Neuroscience of Social Relationships Credits: 3

Submitted by,
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