### TRANSMITTAL | #18-19-14

Senate Programs, Curricula, & Courses (PCC) Committee

### PCC Proposal to Establish a Bachelor of Science in **Human Development (PCC 18023)**

PRESENTED BY Janna Bianchini, Chair, Senate Programs, Curricula, and Courses Committee

REVIEW DATES | SEC - October 29, 2018 | SENATE - November 7, 2018

**VOTING METHOD** In a single vote

**RELEVANT** POLICY/DOCUMENT

NECESSARY Senate, President, University System of Maryland Board of Regents, and **APPROVALS Maryland Higher Education Commission** 

### **ISSUE**

The Department of Human Development and Quantitative Methodology (HDQM) within the College of Education (EDUC) proposes to establish a Bachelor of Science degree program in Human Development. The undergraduate major in Human Development is designed to support student learning about the mechanisms of growth and change across the life span. With areas of focus in developmental science, educational psychology, and statistical methodology, Human Development majors will explore the biological, social, emotional, and cognitive processes of learning and development from conception to old age in diverse social and cultural contexts. Introductory and advanced course work, as well as laboratory research apprenticeships or field experiences, are essential components of the program.

The curriculum will consist of 45 credits organized into the following categories:

- 9 credits of introductory/gateway courses
- 6 credits of statistics and methods courses
- 9 credits of core Human Development courses at the 400 level
- 12 credits of restricted electives
- 3 credits of a pro-seminar
- 6 credits of field experience

Along with a comprehensive knowledge base in human development, students will develop critical thinking and scientific literacy skills, communication and writing skills, and an understanding and appreciation of ethical and social responsibility. Students will also learn to apply their knowledge and skills to their own professional goals. Those who complete the program will be able to take their human development degree in a variety of directions, including health, law, education, public policy, psychology, neuroscience, communication, and marketing. Graduates will be particularly well-suited for careers in educational and social science research and development; social service positions in governmental, NGO's, non-profit and for-profit domains; and instructional (noncertification positions) and administrative roles in educational and childcare organizations.

HDQM Faculty are recognized nationally and internationally for their specific expertise and hold leadership positions in premiere professional organizations. The department's graduate program in Human Development has been offered for decades and is consistently among the highest ranked programs in the nation. The college and department have sufficient resources to provide advising, administration, and instruction for the program. The department's wealth of undergraduate course offerings developed for the minor in Human Development, for the Early Childhood Education certification program, and in service to other programs in the college will be expanded to provide the curriculum.

This proposal was approved by the Senate Programs, Curricula, and Courses committee on October 5, 2018.

### RECOMMENDATION(S)

The Senate Committee on Programs, Curricula, and Courses recommends that the Senate approve this new degree program.

### COMMITTEE WORK

The committee considered this proposal at its meeting on October 5, 2018. D.J. Bolger, Associate Professor in Human Development and Quantitative Methodology, presented the proposal. The proposal was unanimously approved by the committee.

### **ALTERNATIVES**

The Senate could decline to approve this new degree program.

### **RISKS**

If the Senate declines to approve this degree program, the university will lose an opportunity to utilize existing faculty, course, and administrative resources to provide undergraduates with a degree program in human development, the study of development over the lifespan, an academic discipline currently not offered among undergraduate degree programs at the university.

### FINANCIAL IMPLICATIONS

There are no significant financial implications with this proposal for campus as the courses and advising resources already exist within the department and college.

University of Maryland PCC Program/Curriculum/Unit Proposel	PCC Log No: 18023						
Program/Curriculum/Unit Proposal							
Program: Undergraduate Major in Human Development							
Department/Unit: Human Development & Quantitative Me	thodology						
College/School: College of Education							
Proposal Contact Person (with email): Donald Bolger (djbo	lger@umd.edu)						
Type of Action (check one):  Curriculum change (includes modifying minors, concentrations/specializations and creating informal specializations)  Curriculum change is for an LEP Program  Rename a program or formal Area of Concentration  Establish/Discontinue a formal Area of Concentration  Other:	Establish a new academic degree/certificate program  Create an online version of an existing program  Establish a new minor  Suspend/Discontinue a degree/certificate program  Establish a new Master or Certificate of Professional  Studies program  New Professional Studies program will be administered by Office of Extended Studies						
Italics indicate that the proposal must be presented							
Approval Signatures - Please print name, sign, and date. For additional cover sheet(s).  1. Department Committee Chair	reproposals requiring multiple unit approvals, please use $9/12/18$						
2. Department Chair Kelly Sive Mid	9-12-18						
3. College/School PCC Chair DENIS SULLIVAN	Venn Sulluar 9-70-18						
4. Dean <u>Jennifer King Kice</u> <u>Jainhlighton</u> 9/21/18  5. Dean of the Graduate School (if required)							
6. Chair, Senate PCC Janna Banchini	10-5-18						
7. University Senate Chair (if required)/							
8. Senior Vice President and Provost							

#### Instructions:

When approved by the dean of the college or school, please send the proposal and signed form to the Office of the Associate Provost for Academic Planning and Programs, 1119 Main Administration Building, Campus-5031, <u>and</u> email the proposal document as an MSWord attachment to <u>pcc-submissions@umd.edu</u>.

Summary of Proposed Action (use additional sheet if necessary):

The current proposal seeks to establish an undergraduate major in Human Development housed within the Department of Human Development and Quantitative Methodology in the College of Education. The proposed program would be unique, in that there are no other undergraduate degree granting programs in Human Development at a public university in Maryland. The undergraduate major in Human Development is a 45-credit program designed to support student learning about the mechanisms of growth and change across the life span. With areas of focus in developmental science, educational psychology, and statistical methodology, HD Majors will explore the biological, social, emotional, and cognitive processes of learning and development from conception to old age in diverse social and cultural contexts. Students in the HD major will participate in an integrated set of educational experiences to acquire a comprehensive body of interdisciplinary scholarly knowledge in human development, educational psychology, and research methodology.

Unit Code(s) (to be entered by the Office of Academic Planning and Programs):

In order to complete this form, you will need to copy this template to your own document, then complete, print, and submit this proposal with the PCC Cover Sheet

**Program: Bachelors of Science in Human Development** 

Date of Proposal: March 2018

Start Term for New Program: August 2019

A new degree program proposal will need to be approved not just by campus but also by the University System of Maryland (USM) Board of Regents and the Maryland Higher Education Commission (MHEC). New certificate programs need to be approved by the USM Chancellor and MHEC. The following prompts are based on academic policies for programs and reflect campus requirements and MHEC requirements. The prompts also include questions frequently asked by review committees. See <a href="http://mhec.maryland.gov/institutions\_training/Pages/acadaff/AcadProgInstitApprovals/NewAcademicProgram-Proposals.aspx">http://mhec.maryland.gov/institutions\_training/Pages/acadaff/AcadProgInstitApprovals/NewAcademicProgram-Proposals.aspx</a> for more information about MHEC requirements. Please feel free to add additional information at the end of this document or in a separate appendix.

### **Mission and Purpose**

1. Describe the program and explain how it fits the institutional mission statement and planning priorities. The University Mission Statement and Strategic Plan can be found on this site: <a href="https://www.umd.edu/history-and-mission">https://www.umd.edu/history-and-mission</a>.

The Department of Human Development and Quantitative Methodology proposes an undergraduate major in Human Development. The proposed major would join the major in Early Childhood Education/Early Childhood Special Education (EC/ECSE) (co-sponsored by the Department of Counseling, Higher Education and Special Education) already housed in the Department, as well as a minor in Human Development. The Department (HDQM) graduates approximately 35 EC/ECSE majors, and enroll about 200 undergraduates with a minor in Human Development each year. The proposed HD major would graduate 50 students per year, bringing the total number of undergraduate degrees granted per year to approximately 85.

The proposed program would be unique, in that there are no other undergraduate degree granting programs in Human Development at a public university in Maryland<sup>1</sup>.

The undergraduate major in Human Development is designed to support student learning about the mechanisms of growth and change across the life span. With areas of focus in developmental science, educational psychology, and statistical methodology, HD Majors will explore the biological, social, emotional, and cognitive processes of learning and development from conception to old age in diverse social and cultural contexts. Students in the HD major will participate in an integrated set of educational experiences to acquire a comprehensive body of interdisciplinary scholarly knowledge in human development, educational psychology, and research methodology. Introductory and advanced coursework, including laboratory research apprenticeships and/ or field experiences are essential components of the proposed curriculum and meet the current Mission and Strategic Goals of the University of Maryland.

<sup>1</sup> Washington College (a small, private liberal arts college on the Eastern Shore) does offer an undergraduate degree in Human Development; however, this program is focused on elementary education (with or without teacher certification).

Note that the range of topics covered in the proposed HD major has some overlap with the range of topics covered in the undergraduate majors in Family Science and Psychology. But the overlap is not complete, and the relative emphasis of the three majors is different. For example, while all three majors include individual development over the lifespan, individual development is the central focus of the HD major and students will go into much greater depth and detail of individual development than in either the Psychology or Family Sciences major. In contrast, whereas families are considered within the HD major as a context for human development, families are the central focus of the major in Family Science and students undoubtedly go into much greater depth about families than would be possible in the HD major. Similarly, whereas topics like abnormal psychology may be included in HD coursework, the major will not offer as much depth as one could gain in the Psychology major. Second, the level of analysis differs across the three majors. In HD, the mission is to teach students about theoretical models that describe developmental change. These models are often abstract and broadly applicable across specific developmental patterns. For example, the same mechanism might explain how infants learn new words and how high school students learn algebra. Here the interest is in the theoretical model more than any particular developmental problem. In contrast, the FMSC major includes theory but also covers more applied topics, such as family law and family economics. The Psychology major is also highly theoretical with a clinical component, but the topics covered in a psychology major are less focused on developmental change and include a broader range of populations, behaviors, and contexts.

Graduates of the UMCP HD undergraduate major will be well prepared with the knowledge base and skills to pursue, often with additional graduate education, subsequent careers in a variety of occupations in medicine, law, psychology, rehabilitation, behavioral health, education, social services, public policy, communication and marketing. This is because theories of developmental change can help practitioners interpret behavior in these contexts and understand why various interventions may be helpful. Students in the HD program will be well suited for careers in research and development enterprises in education (Educational Testing Service, Children's Television Workshop, Edutopia, etc.), and the behavioral and social sciences (e.g. Westat, American Institutes for Research, etc.); social service agencies in governmental, NGO's, non-profit and forprofit domains; educational institutions (non-certification positions); and offices of Head Start and childcare programs. Graduates of the proposed program would also be well-prepared to apply to graduate programs in Human Development, Educational Psychology and Learning Sciences, Psychology, Neuroscience, and Medicine.

There is some overlap between these occupations and those suited to both Family Science and Psychology majors. Nonetheless, the three disciplines train students with differing backgrounds and skill sets, each of which provides a different lens through which one may approach a common set of issues.

These career paths align exceptionally well with the economic base in the State. Maryland is home to many research and development companies, as well as governmental, NGO's and non-profit agencies with a focus on the behavioral and social sciences and education. An undergraduate degree in Human Development provides a widely accepted pathway into entry-level positions in these settings with many opportunities for subsequent advancement. A review of job opportunities for a recent week on one nationally advertised webbased employment site (http://www.indeed.com) revealed over 500 entry level positions in the behavioral and social sciences in Maryland alone. A more focused review of four selected research and development corporations specializing in educational, behavioral and social science research (Westat, Abt Associates, Mathematica Policy Research, American Institutes for Research), identified numerous entry level opportunities for individuals with undergraduate degrees in Human Development, Psychology, and Education. Initial pay and growth statistics in this field are discussed in Section 21, however, the high demand for individuals with strong

backgrounds in Human Development it has been noted in multiple media venues across the country. A recent piece from Inside Higher Education<sup>2</sup> discusses a new policy in Washington D.C. that all Early Childhood Professionals in the district have formal training in Child Development:

"We know the economy has changed, and by 2020, 75 percent of jobs in the District [Washington D.C.] will require some postsecondary credential," said Elizabeth Groginsky, assistant superintendent of early learning for the nation's capital. "We're keeping up with the research, and having a policy that shows brain development in young children is incredible ... Teachers will need this knowledge and skill base to work with this population."

Our faculty have a successful record of placing our undergraduate research assistants into highly competitive internships at institutions such as NIH, Children's National Medical Center, Kennedy Krieger, and top R1 universities, which have served as gateways to doctoral programs at the leading institutions around the country. Moreover, HD graduates with a background not only in human development and educational psychology but also in measurement, statistics and assessment, may contribute to the design of new methodologies that address educational, youth, and family policy in local, state, and national initiatives.

Whereas the proposed program draws from branches of developmental science and educational psychology and is rooted in the basic and applied sciences that support and serve programs in Family Science, the major in Human Development provides a unique, fundamental program of study on the development of the individual from birth to death and the biological, social, and cultural factors that impact learning and growth. The establishment of the proposed HD program would place the University of Maryland at the cutting edge of the field with a handful of nationally recognized institutions such as Penn State University, University of Minnesota's Institute of Child Development, the University of Texas at Austin, University of California - Davis, Boston College, Northwestern and Vanderbilt University which have established similar or related majors in the developmental and learning sciences.

The unique nature of the faculty that comprise the Department of HDQM enables us to provide a robust and indepth perspective on learning and development setting us apart from our peer institutions. Our nationally and internationally recognized faculty are teaching a growing number of undergraduate students who require a foundational knowledge of development and learning. Our Developmental Science program has been ranked fourth in the nation in a recent review and our Educational Psychology area has repeatedly ranked in the top 5 over the past 15 years in the *US News and World Reports*. Many of these students come from K-12 teacher preparation programs and other human service fields such as Psychology, Family Science, Hearing and Speech, Kinesiology, and Pre-med program with the recognition that this basic knowledge is essential to their careers. This clamoring for the core knowledge that our courses provide is reflected in the popularity of the Human Development minor currently at 200 students (detailed below in section 21).

The undergraduate HD program meets the strategic mission of UMD through its focus on the connection between the acquisition of fundamental knowledge and the application of this knowledge to practice. Through internships with various organizations (e.g., governmental agencies, NGOs, social service providers, research hospitals, R&D companies, etc.), students will gain practical application and fulfill the national and state level goals of career focused education. The proposed program will extend our national and international influence as it serves as a keystone for the next generation of researchers, policy makers, and professionals in the fields of learning and development.

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<sup>&</sup>lt;sup>2</sup> www.insidehighered.com/news/2017/04/11/degree-requirements-child-care-workers-may-improve-industry-raise-concerns-low

### **Program Characteristics**

2. Provide the catalog description of the proposed program. As part of the description, please indicate any areas of concentration or specializations that will be offered.

The field of Human Development is concerned with mechanisms of growth and change across the life course. Thus, HD Majors will explore the biological, social, emotional, and cognitive processes of development from conception to old age in diverse social and cultural contexts. Students in the HD Major will participate in an integrated set of educational experiences to acquire a comprehensive body of interdisciplinary scholarly knowledge in human development, learning, and research methodology. Introductory and advanced course work, as well as laboratory research apprenticeships or field experiences are essential components of the proposed curriculum.

### 3. What are the educational objectives of the program?

In preparation for the career paths outlined above, the program will train students with the objective of developing comprehensive skills in the following key areas:

- 1. Establish a knowledge base of human development across the lifespan ranging from a cognitive, social-emotional, and physiological perspective including the influences of the environmental, historical, and cultural contexts.
- 2. Develop skills of scientific inquiry and critical thinking.
- 3. Foster an awareness of the diversity of cultures, contexts, and abilities within which humans develop and how these differences impact development across the lifespan.
- 4. Achieve mastery in the art of communication related to scientific inquiry and theoretical analysis with a critical awareness of the variety of audiences with whom they may be interacting. Whereas writing is a necessary and critical focus, modes of communication also include oral communication and the use of social media.
- 5. Prepare to enter the workforce. Whereas the previous goals provide the foundation necessary for the 21<sup>st</sup> Century workforce in child development, a substantial focus will be preparation for employment in a variety of public and private sectors generated through internships and externships.

### 4. Describe any selective admissions policy or special criteria for students selecting this program.

The HD Major requires successful completion of 45 credits of coursework, including 9 credits of gateway courses, 6 credits of statistics and research methods, 9 credits of core courses, 12 credits of elective coursework, 3 credits of a capstone seminar, and at least 6 credits of higher-level internship experience or elective coursework. Students are encouraged to apply as entering freshman or sophomores, but can readily accommodate transfers from community colleges. We will use the mandatory advising process to ensure that students have passed the lower level "gateway" coursework before registering for upper-level coursework.

5. Indicate the course requirements with course numbers, titles and credits. If applicable, indicate if any course will also count for a general education requirement. In an appendix, provide the course

catalog information (credits, description, prerequisites, etc.) for all of the courses. Note that suffixed "selected" or "special" topics courses should be avoided. If suffixed-selected or special topics courses are offered regularly in the new program, you should make the courses permanent. Also, please review the basic requirements of <a href="degree programs">degree programs</a> or <a href="certificate programs">certificate programs</a> to ensure that they meet the minimum policy requirements.

Please note: new courses or modifications to courses need to be submitted through the Testudo Curriculum Management system and will need to follow the normal VPAC course proposal review process. You may submit individual course changes to VPAC concurrently with the PCC proposal; however, the course changes may be held depending on the outcome of the PCC proposal.

\*Courses that will need to be created are indicated with an asterisk.

Course	Cr.	Gen-Ed	Prerequisite(s)
Three gateway courses (9 credits)			
*EDHD 2AA – The Study of Human Development: Paradigms and Perspectives	3		
EDHD 201 – Learning How to Learn	3	HS	
EDHD 320 – Human Development through the Lifespan	3	HS	
Two statistics and methods courses (6 credits)			
EDHD 306 – Undergraduate Research Methods	3	AR	
EDMS 451 – Introduction to Educational Statistics	3	AR	
Three of the following five core courses (9 credits)			
EDHD 412 – Infant Development	3	HS	
EDHD 411 – Child Growth and Development	3	HS	
EDHD 413 – Adolescent Development	3	HS	
EDHD 440 – Adult Development	3	HS	

EDHD 460 – Educational Psychology		HS	
Four of the following elective courses (12 credits)			
EDHD 230 – Human Development and Societal Institutions	3	HS/UP	
EDHD 231 – Inside 21 <sup>st</sup> Century Creativity: How Creative Ideas, Concepts, and Products are Generated	3	HS/IS	
EDHD 310 – Your Brain on Education: The Neuroscience of Learning and Development	3	HS/IS	Prerequisite: PSYC100
EDHD 420 – Cognitive Development and Learning	3		Prerequisite: EDHD320, EDHD411, PSYC341, or PSYC355; or permission of EDUC-Human Development and Quantitative Methodology department.
EDHD 425 – Language Development and Reading Acquisition	3		
EDHD 426 – Cognition and Motivation in Reading	3		
EDHD 430 – Adolescent Violence	3		Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.
EDHD 445 – Guidance and Young Children	3		
EDHD 414 – Development of the Scientific Mind Across the Lifespan	3		
EDHD 402 – Social Development	3		Recommended: EDHD411
EDHD 421 – Peer Relations	3		

*EDMS 4DD/623 – Applied Measurement: Issues and Practices	3		
In the final year: To complete 3 credits of pro-semina	ar and	6 credits	of internship/field experience
*EDHD 4AA – Pro-seminar in Human Development	3		
EDHD 489 – Field Experiences in Education	3 (x2)		

Any core course listed above for which core course credit was not given may serve as an elective. This set of courses should be chosen to align with the student's individual program goals and could include extradepartmental course offerings to be found in Appendix A.

Students may, at the invitation of individual faculty, substitute EDHD 498 (1-3 credits), for three of the required 12 credit elective component. For situations in which students wish to pursue a double major, FMSC Majors may substitute FMSC302 for EDHD306, and PSYC Majors may substitute PSYC300 for EDHD306 and PSYC200 for EDMS451 in the HD major.

Students may elect to substitute 6 credits of upper (400 level) electives in place of the internship experience, although internship experience is strongly recommended.

6. Summarize the factors that were considered in developing the proposed curriculum (such as recommendations of advisory or other groups, articulated workforce needs, standards set by disciplinary associations or specialized-accrediting groups, etc.).

The curriculum builds upon existing undergraduate courses that are part of the HD minor, courses taught as part of the General Education curriculum, and courses that service programs both within the College of Education (e.g. Elementary and Secondary Education) as well as programs in other Colleges (e.g. Criminal Justice, Hearing and Speech, etc.).

7. Sample plan. Provide a term by term sample plan that shows how a hypothetical student would progress through the program to completion. It should be clear the length of time it will take for a typical student to graduate. For undergraduate programs, this should be the *four-year plan*.

### Sample 4-Year Plan

NOTE: This is a proposed plan and the College of Education does not guarantee that these courses will be offered in the designated semester. A minimum of 120 credits are required for a degree in addition to satisfactory completion all course and other degree requirements. The total number of credits actually earned

for the degree may exceed 120 depending on the number of "elective" and "double count" courses taken. Consult the *Schedule of Classes* for class availability and meeting times.

### FRESHMAN:

Fall Semester:	Cr.	Spring Semester:	Cr.
ENGL 101 (AW)	3	EDHD201 (HS)	3
MATH 110 or Higher (MA)	3	HUMANITIES (HU)	3
NATURAL SCIENCE WITH LAB Biological (NL)	4	EDHD231 (HS and IS)	3
PSYC 100 (NS)	3	EDHD230 (HS and UP)	3
UNIV 100 (Optional)	1	ORAL COMMUNICATION (OC)	3
Total Credits	14	Total Credits	15

### SOPHOMORE: Apply to Professional Program between 45 and 60 credits

Fall Semester:	Cr.	Spring Semester:	Cr.
EDHD2AA	3	EDHD310 (IS)	3
SCHOLARSHIP IN PRACTICE (SP)	3	GEN ELECTIVE	3
EDHD320 (HS)	3	GEN ELECTIVE	3
HUMANITIES (HU)	3	DV UP or CC	3
GEN ELECTIVE	3	SCHOLARSHIP IN PRACTICE (SP)	3
Total Credits	15	Total Credits	15

### **JUNIOR YEAR:**

Fall Semester:	Cr.	Spring Semester:	Cr.
PROFESSIONAL WRITING (PW)	3	EDHD306	3
EDMS451 (AR)	3	EDHD CORE	3

EDHD CORE	3	EDHD CORE	3
EDHD CORE	3	GEN ELECTIVE	3
GEN ELECTIVE	3	GEN ELECTIVE	3
Total Credits	15	Total Credits	15

#### **SENIOR YEAR**

Fall Semester:	Cr.	Spring Semester:	Cr.
EDHD ELECTIVE	3	EDHD ELECTIVE	3
EDHD ELECTIVE	3	EDHD ELECTIVE	3
PRO-SEMINAR	3	INTERNSHIP/FIELD EXPERIENCE	6
GEN ELECTIVE	3	GEN ELECTIVE	3
GEN ELECTIVE	3	GEN ELECTIVE	1
Total Credits	15	Total Credits	16

Updated 9/17 TOTAL: 120 credits

8. Indicate whether the program will be offered in a non-standard delivery format, such as online delivery, off-campus, or through non-standard terms. Please note that MHEC requires a separate proposal for online or off-campus delivery. If the program will be offered in non-standard terms, describe the term structure and whether the Office of the Registrar and the Office of International Scholar and Student Services have been notified and support the proposal.

N/A

9. For Master's degree programs, describe the thesis requirement and/or the non-thesis requirement.

N/A

<sup>\*</sup> All students must complete two Distributive Studies courses that are approved for <u>I-series courses</u>. Students must complete <u>Understanding Plural Society</u> and <u>Cultural Competence</u> courses that may also fulfill a Distributive Studies category.

10. List the intended student learning outcomes. In an appendix, provide the plan for assessing these outcomes.

The tables below list the intended student learning outcomes, organized by 5 overarching goals. Appendix A provides a detailed plan for how these outcomes will be emphasized by and assessed in the program.

# Goal 1: Develop a comprehensive knowledge base in human development Students will:

- 1A. Understand central questions in the field of human development and the major theoretical approaches to them
- 1B. Describe the sequence of typical development and the underlying processes in the domains of cognitive, linguistic, social, and emotional development
- 1C. Recognize the importance of biology and environment, including context and culture on children's development and learning
- 1D. Understand how human development influences educational practice, and how different educational approaches affect learning and development
- 1E. Appreciate how theory and scientific research are addressed in applied in issues relating to children, family, education, and public policy

# Goal 2: Develop core critical thinking and scientific literacy skills Students will:

2A. Formulate answerable questions about important issues in learning and development, as well as generate and evaluate methods for answering those questions

- 2B. Critically evaluate and reason about empirical evidence relevant to important issues in learning and development, and make informed arguments and decisions on the basis of empirical evidence
- 2C. Critically evaluate current policies and clinical/educational approaches that address important societal issues on the basis of evidence
- 2D. Apply these critical thinking and scientific literacy skills across a wide range and intersection of disciplines in development and education, in both research and applied settings

# Goal 3: Develop understanding of and value ethical and social responsibility Students will:

- 3A. Understand and apply ethical standards in research and practice in human development
- 3B. Show awareness of the diversity of race, cultures, and contexts in which humans develop and grow
- 3C. Apply evidence from human development research to improve policy and practice that fosters ethical and social responsibility and promotes social justice

## **Goal 4: Develop key skills for communication and writing** Students will:

4A. Clearly summarize, assess, and cite empirical evidence and theoretical perspectives, including describing methodology, results, limitations, and implications for a broader audience

- 4B. Formulate clear written arguments and substantively defend them with empirical evidence
- 4C. Present clear evidence-based arguments orally in ways that facilitate communication across a range of academic and non-academic audiences

## Goal 5: Develop key professional skills Students will:

- 5A. Apply both specific knowledge in human development as well as general critical thinking, scientific literacy, and communication skills to career goals
- 5B. Organize, execute, and manage complex, multi-step research and writing projects
- 5C. Develop meaningful, purposeful, and realistic career goals for professional life post-graduation

# 11. Identify specific actions and strategies that will be utilized to recruit and retain a diverse student body.

It is important to note that the design of the program and its curriculum is guided by the department's innate commitment to diversity, equity, and fairness. By its very nature, Human Development theory and research requires experts and their students to examine diverse patterns of growth and development across social, cognitive, emotional, and physical domains throughout the lifespan. The influence of culture, race, ethnicity, and individual differences that promote or restrict access to various kinds of opportunities, power, and resources within societies impacts the ways in which our research is conducted, including the research questions that are asked, the methods used to explore those questions, data collection practices, the statistical analyses used to interpret the data, and the conclusions that are drawn with regard to findings. In other words, the field itself is to a large extent defined by its focus on human diversity. In alignment with that fundamental disciplinary underpinning, the department is dedicated to fulfilling the University's admission mission philosophy of "admitting and enrolling the most talented, diverse and interesting class possible" (University of

Maryland, 2013).

Once admitted, specific retention efforts will be employed to ensure the success of all students in the program. The department will:

- Employ a strong, faculty directed advising model, in which students will be supported to examine their
  individual career and life goals and to design and succeed in a composite of required and elective
  courses that best facilitate those outcomes;
- Ensure that all courses address theory and research which examine central issues related to the (a)
  influence of diversity on growth and development and (b) practical implications for application of course
  content in diverse professional work-related and educational settings;
- Assist students in identifying and securing the most personally relevant and meaningful internship and service learning placements;
- Assist students in the design and implementation of a) an internship experience, or b) a faculty-advised Capstone Project or Honors Thesis (Appendix B), either of which will be strongly related to students' individual career goals and the work that is being completed in the end of program internship.

Learning outcomes associated with these projects will measure students' understanding of the needs of target populations of varying age, gender, race, and ethnicity. The student will need to demonstrate that he/she understands the importance of differentiated service delivery and how that can be influenced by individual differences with regard to culture, development, motivation to achieve, or other ecological parameters.

The driving force in this department is one of inclusion and diversity and the teaching and scholarship from the faculty are world renown for their focus on culture, context, and the impact on human development. Retention of our students, specifically those of underrepresented minority backgrounds, will happen through the organization of student groups and honor societies both lead by the students as well as those with dynamic interaction with the faculty. Such organizations include an undergraduate student organization (UGSO), an HD Honor Society, as well as participating department and college led groups (e.g. Center for Child Relationships and Culture; Center for Language and Literacy; etc.). Because a large portion of the routine course advising occurs through the College's Office of Student Services, the efforts of the Departmental advising staff (the Program Director and GA) will focus sharply on enrollment, retention, time to graduation, and career guidance for students of underrepresented groups.

### **Relationship to Other Units or Institutions**

12. If a required or recommended course is offered by another department, discuss how the additional students will not unduly burden that department's faculty and resources. Discuss any other potential impacts on another department, such as academic content that may significantly overlap with existing programs. Use space below for any comments, otherwise add supporting correspondence as an appendix.

The proposed program in Human Development is unique in its focus on social, emotional, and cognitive mechanisms of development of the individual, and its implications for learning particularly in the context of education. However, as noted above, it overlaps somewhat with content of the majors in Psychology and Family Science. Specifically, both of these majors include topics related to child development, individual development, and lifespan development, which are clearly central to the study of human development. Because of this overlap, one concern might be a negative impact on enrollments in those majors. We can estimate the number of students who might shift by examining the enrollments in the current minor in Human

Development. The 2017-18 enrollment in the HD minor was roughly 200 undergraduates, across a range of majors. Of these 200 students, 62 (31%) have a primary major in Psychology and 28 (14%) have a primary major in Family Science. It is possible that, given the option to major in Human Development and minor in Psychology or Family Science, some of these students may shift. However, these numbers are relatively small compared to the total enrollments in these majors (Psychology: n = 950; Family Science n = 350), so it is unlikely that the major in Human Development will substantially impact these programs.

Through our relationships with programs in Psychology and Family Science, we have consulted on sets of courses that may be fundamentally equivalent or may substitute for such courses within the program including core and elective courses (See Appendix A). This continued interaction is meant to reduce the burden on students for duplicating coursework particularly for those seeking to major in more than one program. This spirit of engagement will reduce competition between programs and enable our departments to support one another's academic missions through flexibility in course requirements, course enrollments, and course offerings.

See letters from Psychology and Family Science in Appendix .

13. Accreditation and Licensure. Will program need to be accredited? If so, indicate the accrediting agency. Also, indicate if students will expect to be licensed or certified in order to engage in or be successful in the program's target occupation.

The program does not involve professional accreditation or certification. Students will not be expected to be licensed or certified to be successful in their careers following this Major.

14. Describe any cooperative arrangements with other institutions or organizations that will be important for the success of this program.

Internships and research experiences are important, and students have the option of participating in external career and research experiences. As in programs such as Family Science, finding and organizing these placements will generally be the responsibility of students, but will be facilitated and supported by the program director and/or other faculty. Cooperative arrangements with agencies, businesses, and research institutions in the area will emerge organically rather than having a formal placement process in place. There are two reasons for this. First, HDQM majors will likely be interested in a variety of experiences, and this will allow them to craft unique experiences that fit their interests, with the support of our faculty and their connections. Second, many students will likely choose to complete an internship in a research lab in our department or elsewhere campus instead of an off-campus internship. Finally, some students may choose to take additional advanced elective coursework in lieu of an internship. This model allows for maximum flexibility.

Moreover, this experience of finding a career path and seeking employment (or internship experience) will be a fundamental part of the students' experience in the program. Through the Capstone Seminar course taking place in the spring of their junior year, students will walk through career plans, draft resumes, address

professional standards and behavior, discuss ethical issues, and both draft internship plans/contracts with the goal of carryout out those internships in the Summer/Fall of their senior year.

External placements. The greatest need in this area will be for high quality internship and service learning placements. The Department intends to work closely with the University Career Center & The President's Promise (<a href="https://careers.umd.edu/">https://careers.umd.edu/</a>) to ensure that our students have access to opportunities in the field. In addition, we will continue to work with the Office of Leadership and Community Service-Learning in the Adele H. Stamp Student Union - Center for Campus Life for support toward more service learning and leadership experiences for our students. The office has worked with our faculty through workshops and individual consultation to facilitate the integration of experiential learning into course designs. The office also maintains a comprehensive database of community organizations that can be accessed in the design of internship and service learning opportunities (<a href="http://thestamp.umd.edu/leadership\_community\_service-learning/service-opportunities">http://thestamp.umd.edu/leadership\_community\_service-learning/service-opportunities</a>).

**Current laboratory facilities.** Currently, the department houses 16 faculty research labs, which serve the needs of approximately 110 students. HDQM faculty already advise many undergraduate students on campus in other majors who seek out HDQM faculty to work in their labs.

The Center for Young Children (CYC). The CYC is administratively housed within the Department of Human Development and Quantitative Methodology. This facility is designed to support the observation of children in their daily school activities and currently serves as an important resource for students in Human Development courses. We are anticipating an increase in the need for observational experiences as a function of admitting students to the Major and will work internally to facilitate those opportunities.

### **Faculty and Organization**

15. Faculty and organization. Who will provide academic direction and oversight for the program? As an appendix, please indicate the faculty involved in the program. Include their titles, credentials, and courses they may teach for the program.

The program will be housed in the Department of Human Development and Quantitative Methodology, College of Education. HDQM Faculty are recognized nationally and internationally for their specific expertise and hold leadership positions in premiere professional organizations. Faculty routinely present at national and international conferences, and publish theoretical and empirical research articles in high impact peer-reviewed journals. Many of the faculty hold Fellow status in associations such as the American Psychological Association, the American Psychological Society, and the American Educational Research Association, and most serve, or have served, as consulting, associate, or principal editors of leading journals in the field, including the American Educational Research Journal, Contemporary Educational Psychology, Developmental Psychology, Child Development, the Journal of Applied Developmental Psychology, Adolescence, Human Development, Journal of Research in Adolescence, International Journal of Behavioural Development, Psychological Methods, Multivariate Behavioral Research, Journal of Educational and Behavioral Statistics, Educational and Psychological Measurement, Journal of Educational Measurement, and many others.

HDQM faculty conduct research across the lifespan in a broad range of important areas in Human Development and many are leading experts in quantitative methodology. The Developmental Science faculty, who were recently ranked 4th in the nation<sup>3</sup>,train students in areas of social, cognitive, emotional, self and biological domains of human development. In the Educational Psychology program, faculty focus on the cognitive, motivational, and sociocultural aspects of learning and development that take place in educational contexts. Early Childhood Faculty study the development and education of young children. The Measurement, Statistics, and Evaluation faculty study the principles of measurement, applied statistics, and evaluation of institutional and organizational programs and are considered one of the best quantitative methods faculty in the nation. Students enrolled in the HD Undergraduate Major will receive the highest quality instruction by faculty who are uniquely positioned to teach human development and quantitative research methodology. A total of 22 HDQM tenured/pre-tenured and clinical faculty have the responsibility for curriculum and programmatic decisions. A full list of faculty and their credentials along with biographical sketches can be found in Appendix C.

### Resource Needs and Sources

16. Each new program is required to have a library assessment in order to determine any new library resources that may be required. Please contact your departmental/programmatic library liaison or Daniel Mack at dmack@umd.edu, Associate Dean of Collections, to request a library assessment that will be added as an appendix.

Students in the Major will need to complete a variety of course and programmatic assessments requiring them to read, understand, and translate Human Development empirical research into principles of practice in a variety of professional settings. The existing databases in the Hornbake and McKeldin Libraries should support the completion of the majority of these assignments. The McKeldin Research Port includes databases that are typically the source of reference for peer-reviewed journal articles, book chapters, and monographs/reports used by faculty and graduate students in the field; those databases include Psycinfo, ERIC, Education Research Complete, Medline, and many others. Access to other information resources, e.g. translation services, videos, audiotapes, film editing services, etc. may also be required. Access to additional library resources at DC Metropolitan area institutions, in national and/or international databases, the National Institutes of Health, etc. can be arranged with the help of faculty. Please see Letter from University of Maryland Libraries, which includes a formal evaluation by the Hornbake and McKeldin Library staff.

### 17. Discuss the adequacy of physical facilities, infrastructure and instructional equipment.

The facilities that are already in existence are adequate to handle the demands of the proposed major and the course offerings within the program. There are few new courses proposed and the space needed for additional personnel is minimal.

<sup>&</sup>lt;sup>3</sup> http://u.osu.edu/adventuresinhdfs/the-hdfs-report-claire-kamp-dushs-ranking-of-hdfs-programs-in-north-america/

18. Discuss the instructional resources (faculty, staff, and teaching assistants) that will be needed to cover new courses or needed additional sections of existing courses to be taught. Indicate the source of resources for covering these costs.

Assignment of faculty to courses. HDQM standard procedure for assignment of faculty to courses will be followed. For every course scheduling round, the Director of Academic Services and Outreach (DASO) will assess, along with the Program Director and Director of the Office of Student Services (OSS) in the College, student need for various courses in the undergraduate Major program. A proposal for undergraduate course offerings will be shared by the DASO with the Department Chair, along with recommendations for faculty course assignments that are in alignment with the faculty's expertise, students' current programmatic needs, and departmental administrative concerns such as faculty buyout, sabbatical, and course overload considerations. Final approval of all undergraduate course schedules will be the responsibility of the Department Chair.

Because the vast majority of these courses are currently being taught with relatively low enrollments, there is not expected to be a large increase in the number of section offerings of the courses. As there is room within the department's FTE loads and course offerings, the new EDHD2AA will be taught by current faculty on-load. In addition the department has hired a full-time lecturer and will be seeking to hire a full-time program director with funds made available from the Dean's office and the department's fund balance. The PD will be responsible for several gateway courses and the Capstone Seminar (EDHD390) as well as be responsible for the Internship Experience courses (EDHD497/498).

19. Discuss the administrative and advising resources that will be needed for the program. Indicate the source of resources for covering these costs.

Student advising. Student advising will proceed as a dual process, shared by the HD Program Director, the program Graduate Assistant, and the OSS in the College of Education. All students entering the program will be required to meet with a Department advisor for academic advising and program planning. This academic advising is required to help a student outline his/her educational and career goals and research objectives as clearly as possible, and identify the courses and internship experiences available within the program that best align with those objectives. This beginning faculty/student advising relationship is expected to be ongoing throughout the student's time in the program so that appropriate adjustments can be made to the student's program plan if they are indicated. Students will be given the opportunity to meet with an academic advisor each semester during their time in the program. The second level of advising will be that provided by the OSS, in collaboration with Department faculty advisors. OSS has advised the department that their unit will provide technical and procedural support to both faculty and students with regard to orientation, Freshman Follow-up Review, and strict adherence to University policy with regard to review of benchmark requirements for graduation, and other program completion requisites such as general education requirements. The advising structure for the program is as follows:

### Tier 1: Program Director

A full-time professional track faculty member will be hired in HDQM to serve as Program Director, and have overall responsibility for all academic and administrative aspects of the program. Specifically, the Program Director will supervise all activities related to:

- Course management and approval;
- · Initiation and maintenance of recruitment efforts about the program to Campus and the broader community;
- · Ongoing advising of interested or enrolled students regarding career trajectories and appropriate course selections + fulfillment of requirements;
- · Management of all internship placements, contracts, and course credit;
- Design of program evaluation, collection of evaluation data, and maintenance of evaluation database.
- · Oversight of the content of the program website.

In addition, this person will be expected to teach the Capstone Seminar (EDHD390) course that will prepare students for their career paths and internship experiences as well as teaching in gateway courses as needed.

#### Tier 2: HD Graduate Assistant

The Program Director will be assisted in program maintenance activities by one full-time Graduate Assistant. This graduate assistant will be primarily responsible for some portion of the academic advising in the program, managing the service-learning and internship components of the program, as well as assisting the Program Director with initiation and maintenance of relationships with UM Alumni who may be interested in providing these opportunities.

### Tier 3: Office of Student Services (OSS), College of Education

The OSS in the CoE will join department advisors in a dual advising model. OSS will provide student services related to CoE orientation programs and recruitment resources. This office will also provide technical advising for students with regard to benchmark oversight by conducting two specific kinds of progress reviews: (a) a Freshman Follow-up Performance Review with student feedback where indicated; (b) 45, 60, and 90 credit reviews for timely progress toward general education and other graduation requirements. In addition, OSS will also provide support to the home academic unit (HD) with regard to transfer of credit from other institutions, course equivalencies for International Study Abroad, service-learning or internship credits, graduation clearance procedures, and other University policies regarding undergraduate education.

### Tier 4: Office of Undergraduate Admissions

The Program will require the support of the Office of Undergraduate Admissions. All freshman applicants will apply to the program per the standard application procedures outlined by the University.

Funding for the Program Director and the Graduate Assistant will come from support from the Dean's office in addition to the available fund balance of the department. The department has recently hired a full-time lecturer to increase our undergraduate offerings in light of the impending major.

20. Use the Maryland Higher Education Commission (MHEC) commission financial tables to describe the program's financial plan for the next five years:

https://docs.google.com/spreadsheets/d/1V6iSZG05edMitWP6CAOXjCoGO58Gf6VXxPaacKfrhZ4/edit #qid=0. Add these tables as attachments.

**TABLE 1: RESOURCES** 

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds*	\$341,121	\$418,050	\$499,341	\$512,521	\$526,097
2. Tuition/Fee Revenue (c+g below)	\$	\$ -	\$ -	\$	\$ -
a. #FT Students	35	70	105	105	105
b. Annual Tuition/Fee Rate	\$ 13,575	\$ 13,982	\$14,402	\$14,834	\$15,279
c. Annual FT Revenue (a x b)	\$ -	\$ -	\$ -	\$ -	\$ -
d. # PT Students	5	10	20	20	20
e. Credit Hour Rate	\$565.40	\$582.36	\$599.83	\$617.83	\$636.36
f. Annual Credit Hours	16	16	16	16	16
g. Total Part Time Revenue (d x e x f)	\$ -	\$ -	\$ -	\$ -	\$ -
3. Grants, Contracts, & Other External Sources	\$ -	\$ -	\$ -	\$ -	\$ -
4. Other Sources	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL (Add 1 - 4)	\$341,121	\$418,050	\$499,341	\$512,521	\$526,097

<sup>\*</sup>Reallocated funds have come from the Dean's office of the College of Education for the Program Director and FT lecturer. In addition, the department is hiring two TT lines this year with another expected in the following years to replace retiring faculty. In addition, current TT faculty and Graduate Student TAs will shift teaching toward Gateway and Core courses as well as popular electives. These courses will also be offered more regularly during Summer and Winter sessions leading to increased revenue for the program.

**TABLE 2: EXPENDITURES** 

TABLE 2. EXI ENDITORES					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	\$133,000	\$205,485	\$282,199	\$290,665	\$299,385
a. #FTE	1.0	1.5	2.0	2.0	2.0
b. Total Salary	\$100,000	\$154,500	\$212,180	\$218,545	\$225,102
c. Total Benefits	\$33,000	\$50,985	\$70,019	\$72,120	\$74,284
2. Admin. Staff (b+c below)	\$99,750	\$102,743	\$105,825	\$109,000	\$112,270
a. #FTE	1.0	1.0	1.0	1.0	1.0
b. Total Salary	\$75,000	\$77,250	\$79,568	\$81,955	\$84,413
c. Total Benefits	\$24,750	\$25,493	\$26,257	\$27,045	\$27,856
3. Total Support Staff (b+c below)	\$0	\$0	\$0	\$0	\$0
a. #FTE	0.0	0.0	0.0	0.0	0.0
b. Total Salary	\$0	\$0	\$0	\$0	\$0
c. Total Benefits	\$0	\$0	\$0	\$0	\$0
4. Graduate Assistants (b+c)	\$48,371	\$49,822	\$51,317	\$52,857	\$54,442
a. #FTE	1.0	1.0	1.0	1.0	1.0
b. Stipend	\$23,431	\$24,134	\$24,858	\$25,604	\$26,372
c. Tuition Remission	\$17,208	\$17,724	\$18,256	\$18,804	\$19,368
d. Benefits	\$7,732	\$7,964	\$8,203	\$8,449	\$8,703
5. Equipment	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
6. Library	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
7. New or Renovated Space	\$0	\$0	\$0	\$0	\$0
8. Other Expenses: Operational					
Expenses	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
TOTAL (Add 1 - 8)	\$341,121	\$418,050	\$499,341	\$512,521	\$526,097
resources - expenditures	\$0	\$0	\$0	\$0	\$0

### Implications for the State (Additional Information Required by MHEC and the Board of Regents)

If the proposed program is for a Post-Baccalaureate Certificate that is derived entirely from existing courses within an existing Master's degree program, then you **only** need to respond to prompts 21 (on market demand) and 24 (curriculum of current master's degree program).

21. Explain how there is a compelling regional or statewide need for the program. Argument for need may be based on the need for the advancement of knowledge and/or societal needs, including the need for "expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education." Also, explain how need is consistent with the Maryland State Plan for Postsecondary Education.

Discussion of societal needs and advancement of knowledge in Human Development is well-addressed in section 1. An undergraduate degree in Human Development (HD) is excellent preparation for graduate and professional schools and prepares students for a variety of professional work opportunities. Graduates may pursue careers in medicine, law, psychology, rehabilitation, behavioral health, education, social services, public policy, communication and marketing. Graduates would be well-prepared to enter graduate school with strong undergraduate preparation in laboratory science. Students coming out of undergraduate programs in Human Development on average will earn between \$32,000-\$42,000 starting salary, however, most students in such programs go on to earn advanced degrees<sup>4</sup>. Growth in the field of jobs for professionals with childcare/preschool administration backgrounds is expected to grow by 23.5% over the next 10 years<sup>5</sup>. For instance, newly passed regulations in Washington D.C. require that all lead childcare teachers have at least an associates degree and all directors have at least a bachelors degree by 2020<sup>6</sup>. From a recent piece from Inside Higher Education<sup>7</sup>:

"We know the economy has changed, and by 2020, 75 percent of jobs in the District will require some postsecondary credential," said Elizabeth Groginsky, assistant superintendent of early learning for the nation's capital. "We're keeping up with the research, and having a policy that shows brain development in young children is incredible ... Teachers will need this knowledge and skill base to work with this population."

In short, there is a great need for individuals who understand child development to manage and lead organizations across the sector including educational/daycare, foster and adoptions, parental interventions and strategies, family outreach, and health research. It is imperative that these opportunities are filled by individuals with diverse backgrounds who will be able to engage with and understand the multitude of factors systemic to the communities from which they emerged. Thus, the need for a highly diverse workforce demands that we ensure a highly diverse student body.

The major in HD will make use of multiple means for delivering instruction, in keeping with the State and University's values. Our pedagogical approach will enable us to meet the "Maryland Ready" goals of: 1) a quality and effective program with the majority of our undergraduate courses being taught by full-time faculty in the department, 2) access, affordability, and completion by enabling multiple means of content delivery, which include online course offerings, hybrid courses, and hands on laboratory and internship experiences; 3) diversity by increasing the ways to meet the needs of an economically and regionally diverse student body particularly those non-traditional students who are working to support their education; and 4) economic growth

<sup>4</sup> www.collegefactual.com/majors/family-consumer-human-sciences/human-development-family-studies

<sup>&</sup>lt;sup>5</sup> www.studentscholarships.org/salary/522/education administrators preschool and child care center program.php

<sup>&</sup>lt;sup>6</sup> osse.dc.gov/publication/final-rulemaking-licensing-child-development-facilities

<sup>&</sup>lt;sup>7</sup> www.insidehighered.com/news/2017/04/11/degree-requirements-child-care-workers-may-improve-industry-raise-concerns-low

and vitality by increasing the labor force of highly trained and well-educated child development and elder-care specialists that are needed to support future generations in meeting their potential and to meet the social, emotional, and psychological needs of the "baby-boomer" generation. Our approach provides opportunities for students to engage with the course content in out-of-classroom experiences, which is central to the goals and outcomes of the major by spending less time in the lecture hall and more time in the field per se. This approach will also enhance the visibility of the program and confront the demands for more mobile and in-vivo learning experiences.

22. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program. Possible sources of information include industry or disciplinary studies on job market, the USBLS Occupational Outlook Handbook, or Maryland state Occupational and Industry Projections over the next five years. Also, provide information on the existing supply of graduates in similar programs in the state (use MHEC's Office of Research and Policy Analysis webpage for Annual Reports on Enrollment by Program) and discuss how future demand for graduates will exceed the existing supply. As part of this analysis, indicate the anticipated number of students your program will graduate per year at steady state.

#### **Student Audience and Enrollment Estimates**

An undergraduate major in Human Development is predicted to be a popular option among the student body at the University of Maryland based upon the popularity of our undergraduate minor and related majors in Psychology and Family Science as well as the continued success of programs at rival institutions across the country. Students enrolled in our minor and undergraduate courses have consistently inquired about further study including the desire to develop an Honors program in the near future.

Human development minor. The undergraduate minor in Human Development is a popular program which currently serves 200 students from across campus. Students in the Human Development Minor were recently questioned for their views on the possibility of an undergraduate Major. The majority of survey respondents indicated that if there had been an undergraduate Major in HD when they entered the University that this would have been of interest to them. Based on this, assuming we enrolled all 300 applicants and some of these chose to major in HD instead of taking the minor, we estimate a total enrollment in the major of 200 students.

We may also obtain enrollment estimates by comparison to our peer institutions. There are roughly 140<sup>8</sup> bachelor degree programs of Human Development across the country consisting of roughly 14,000 undergraduate students<sup>9</sup> in the U.S. Student enrollment in Human Development Majors at regional and peer institutions indicates that the major is a popular choice for students. For example, Penn State University has a program in Human Development and Family Science, which has a total of 350 declared majors. At Boston College, Applied Psychology and Human Development is the 8th most popular undergraduate major (out of more than 50), with 403 out of 9,110 undergraduates enrolled as of Fall 2012. At UC Davis, Human Development is the 15th most popular major (out of more than 100), with 504 out 25,759 undergraduates enrolled as of Fall 2012. The University of Texas at Austin actually has *two* popular human development programs. The UT major in Applied Learning and Development in the College of Education had 1,003 students enrolled as of Fall 2011, while the major in Human Development and Family Sciences in the School of Human

<sup>8</sup> https://bigfuture.collegeboard.org/college-search?major=710\_Human%20Development%20and%20Family%20Studies

<sup>&</sup>lt;sup>9</sup> https://www.collegefactual.com/majors/family-consumer-human-sciences/human-development-family-studies/

Ecology had 454 students. Finally, at the University of Wisconsin – Madison, 187 undergraduates are currently enrolled in the Human Development and Family Studies major. Based on the enrollments in these competitor institutions, it is possible our enrollments will exceed 200 majors.

According to the **USBLS** Occupational Outlook Handbook, jobs in Community and Social Service Occupations are expected to grow 14% in the next 10 years, faster than average. Relevant jobs listed under this category include: health educators and community health workers, marriage and family therapists, and social workers. This is confirmed by data compiled by The College Board. In addition, jobs in Life, Physical and Social Science Occupations are also expected to grow 10% in the next 10 years, faster than average. Relevant jobs listed under this category include: psychologists, sociologists, and survey researchers. Whereas these jobs entail some post-baccalaureate training, the HD major provides the appropriate undergraduate background to advance to the appropriate graduate training programs.

According to the **Maryland state** Occupational and Industry Projections, relevant jobs for HD graduates include Social Science Research Assistants, Survey Researchers, Early Childhood Education Professionals (non-certified), School Counseling, School Psychologists and Social Workers, and Health care social workers. In the next 2 years, these jobs are projected to grow by an additional 236 positions in the state of Maryland alone.

According to MHEC's Office of Research and Policy Analysis webpage for Annual Reports on Enrollment by Program, we found 0 Human Development majors at Washington College in 2016, suggesting this major is a new major for students starting in 2017. Bowie State University has approximately 100 students enrolled in its Child and Adolescent Studies program (99 in 2016) which translates to 25-33 students graduating each year (Bowie State students can declare a major when enrolling at the university or at the end of their sophomore year.).

23. Identify similar programs in the state. Discuss any differences between the proposed program and existing programs. Explain how your program will not result in an unreasonable duplication of an existing program (you can base this argument on program differences or market demand for graduates). The MHEC website can be used to find academic programs operating in the state: <a href="http://mhec.maryland.gov/institutions\_training/pages/HEPrograms.aspx">http://mhec.maryland.gov/institutions\_training/pages/HEPrograms.aspx</a>.

Washington College offers a Human Development major toward a BA degree but this major has a slightly different emphasis than the proposed UMD HD major. First, Washington College's Human Development major is a self-described liberal arts major, with a focus on prospective elementary school teachers. Thus, this major has two tracks: it can be combined with Elementary Ed certification or not. With the certification focus, the major is quite different from the HD major proposed as the majority of required courses are focused on elementary education. The non-certification track requires 4 core courses along with a capstone experience and these courses are somewhat similar to courses in the HD major although the UMD HD major requires substantially more development courses as well as a statistics course. Washington College's non-certification Human Development major includes elective courses in Anthropology, Sociology, and Psychology whereas the proposed HD major's courses are predominantly in development.

Towson University has a Department of Family Studies and Community Development which mirrors more closely UMD's Department of Family Science. Within this department there are two programs: "Family and

Human Services" and "Family Science". The former program having a more applied focus on "family life methodology, theories of family functioning, dynamics within families and interaction between families and the larger social context." Despite the statement that the program focuses on the "study and application of individual and family development across the lifespan", the coursework and emphasis listed is clearly on the family (<a href="https://www.towson.edu/cla/departments/familystudies/documents/comparison of 2 majors.pdf">https://www.towson.edu/cla/departments/familystudies/documents/comparison of 2 majors.pdf</a>). The latter program is more research focused with specific emphasis on "the study of families and relationships in the context of contemporary society." Given the the major in HD at the University of Maryland is focused more specifically at the social, emotional, cognitive (and neural) development of the individual child and adult, it would no more be seen as a competitor to the two programs at Towson in Family Science as our own major in Family Science.

There are other colleges and universities with similar programs (see Section 24 on HBIs).

24. Discuss the possible impact on Historically Black Institutions (HBIs) in the state. Will the program affect any existing programs at Maryland HBIs? Will the program impact the uniqueness or identity of a Maryland HBI?

The proposed HD major will not impact the identities of any of the four Maryland HBIs, as the similar programs offered by each of these universities are common across many colleges and universities and are not linked to the HBI identity.

Coppin State University, UMD Eastern Shore, and Morgan State University do not offer a program similar to the proposed HD major. Both Morgan and Coppin offer bachelor's degrees in Elementary Education and Psychology. The Elementary Education major focuses on training prospective elementary school teachers and the Psychology major aligns with the current UMD Psychology major more than the proposed HD major. UMD Eastern Shore offers a Child Development major which focuses solely on child development; the addition of a HD major should not impact enrollment into this program.

Bowie State University has a Child & Adolescent Studies major which is the program most similar to the proposed HD major. Despite the similarity in some of the required courses, the program at Bowie State does not include adult development and it emphasizes clinical experience as opposed to research experience. Students interested in studying a wider age range or in a more intensive research experience will be attracted to the HD major at UMD. It is possible that a very small number of students who would normally enroll at Bowie State may decide to enroll at UMD instead. Given the small percentage of students who are deciding between Bowie State and UMD and the small percentage UMD students who would major in HD, we believe there will only be 0-1 students affected by the proposed HD program. Thus, we do not anticipate the proposed HD major to affect enrollment at Bowie State University.

25. For new Post-Baccalaureate Certificates derived from existing master's programs only, include the complete curriculum of the existing master's program.

### Appendix A

**Extra-Departmental Electives** 

FMSC Majors may substitute FMSC302 for EDHD306.

PSYC Majors may substitute PSYC300 for EDHD306 and PSYC200 for EDMS451.

### **PSYCHOLOGY ELECTIVES**

**PSYC 200 Statistics** 

PSYC 206 Developmental Biopsychology

PSYC 221 Social Psychology

PSYC 300 Methods

PSYC 301 Biological Basis

PSYC 318 Community Interventions

PSYC 319 Community Interventions

PSYC 330 Child Psychopathology

PSYC 332 Human Sexuality

PSYC 334 Interpersonal Relationships

PSYC 336 Women

PSYC 337 Community Psychology

PSYC 341 Memory and Cognition

PSYC 353 Adult Psychopathology

PSYC 402 Neural Systems and Behavior

PSYC 436 Clinical Psychology

### SOCIOLOGY ELECTIVES

SOCY 227 Deviance

SOCY 230 Social Psychology

SOCY 241 Inequality

SOCY 325 Gender

SOCY 412 Demography

SOCY 424 Race Relations

SOCY 430 Social Structure and Identity

SOCY 440 Self-Concept

SOCY 442 Family and Social Class

SOCY 443 Family and Society

SOCY 444 Sociology of Children

SOCY 467 Sociology of Education

### **FAMILY SCIENCE ELECTIVES**

FMSC 105 Individuals in Families

FMSC 290 Family Economics Restricted to FMSC majors and non-majors with less than or

#### equal to 60 credits

FMSC 330 Family Theories and Patterns

FMSC 332 Children in Families

FMSC 430 Gender Issues in Families

FMSC 431 Family Crises and Intervention

FMSC 452 Family Policy Analysis

FMSC 460 Violence in Families

FMSC 480 Work and Family Issues

FMSC 497 The Child and the Law

## ELECTIVES APPROVED BY PROGRAM ADVISOR FROM THE FOLLOWING DEPARTMENTS TO SATISFY INDIVIDUAL SUTDENTS' PROGRAM GOALS:

AASP - African American Studies

AAST - Asian American Studies

AMST - American Studies

ANTH - Anthropology

BMGT - Business and Management

CCJS - Criminology and Criminal Justice

**ECON - Economics** 

**GVPT - Government and Politics** 

HESP - Hearing and Speech Sciences

HLTH - Health

LING - Linguistics

RELS - Religious Studies

SLLC - School of Languages Literatures and Cultures

SPHL - Public Health

STAT – Statistics and Probability

WMST - Women's Studies

Appendix B: Assessment of Student Learning Outcomes
Appendix X: Targeting and Assessment of Student Learning Outcomes

Goal 1: Develop a comprehensive knowledge base in human development

	1A. Understand central questions in the field of human development and the major theoretical approaches to them	1B. Describe the sequence of typical development and the underlying processes in the domains of cognitive, linguistic, social, and emotional development	1C. Recognize the importance of biology and environment, including context and culture on children's development and learning	1D. Understand how human development influences educational practice, and how different educational approaches affect learning and development	1E. Appreciate how theory and scientific research are addressed in applied in issues relating to children, family, education, and public policy
Course(s) Targeting Sub- goal	EDHD 2AA – Study of Human Development: Paradigms & Perspect. EDHD 390 – Career Paths in Human Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 320 – Human Development through the Lifespan EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 230 – Human Development and Societal Institutions EDHD 310 – Your Brain on Education: The Neuroscience of Learning & Devel. EDHD 320 – Human Development through the Lifespan EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 230 – Human Development and Societal Institutions EDHD 390 – Career Paths in Human Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 2AA — Study of Human Development: Paradigms & Perspect. EDHD 201 — Learning How to Learn EDHD 411 — Child Growth and Development EDHD 413 — Adolescent Development EDHD 420 — Cognitive Development and Learning EDHD 425 — Language Development and Reading Acquisition EDHD 460 — Educational Psychology
How Sub-goal is Assessed	Written     Assignments     Exams	<ul><li>Written     Assignments</li><li>Oral     Presentations</li></ul>	<ul><li>Written     Assignments</li><li>Exams</li></ul>	Written     Assignments     Exams	<ul><li>Written     Assignments</li><li>Exams</li></ul>

Goal 2: Develop core critical thinking and scientific literacy skills

	2A. Formulate answerable questions about important issues in learning and development, as well as generate and evaluate methods for answering those questions	2B. Critically evaluate and reason about empirical evidence relevant to important issues in learning and development, and make informed arguments and decisions on the basis of empirical evidence	2C. Critically evaluate current policies and clinical/educational approaches that address important societal issues on the basis of evidence	2D. Apply these critical thinking and scientific literacy skills across a wide range and intersection of disciplines in development and education, in both research and applied settings
Course(s) Targeting Sub-goal	EDHD 306 – Research Methods EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 426 – Cognition and Motivation in Reading	EDHD 201 – Learning How to Learn EDHD 390 – Career Paths in Human Development EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 230 – Human Development and Societal Institutions EDHD 390 – Career Paths in Human Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 306 – Research Methods EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology
How Sub-goal is Assessed	<ul><li>Exams</li><li>Written     Assignments</li><li>Case Study     Presentation</li></ul>	<ul><li>Written     Assignments</li><li>Exams</li></ul>	<ul> <li>Written         Assignments</li> <li>Group         Presentations</li> <li>Group Debates</li> </ul>	<ul> <li>Written     Assignments</li> <li>Group     Presentations</li> <li>Group Debates</li> </ul>

Goal 3: Develop understanding of and value ethical and social responsibility

	3A. Understand and apply ethical standards in research and practice in human development	3B. Show awareness of the diversity of race, cultures, and contexts in which humans develop and grow	3C. Apply evidence from human development research to improve policy and practice that fosters ethical and social responsibility and promotes social justice
Course(s) Targeting Subgoal	EDHD 4AA – Pro-seminar in Human Development EDHD 390 – Career Paths in Human Development EDHD 402 – Social Development EDHD 425 – Language Development and Reading Acquisition	EDHD 230 – Human Development and Societal Institutions EDHD 231 – Inside 21st Century Creativity EDHD 402 – Social Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 460 – Educational Psychology	EDHD 230 – Human Development and Societal Institutions EDHD 402 – Social Development EDHD 411 – Child Growth and Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 425 – Language Development and Reading Acquisition
How Sub-goal is Assessed	<ul><li>Written Assignments</li><li>Exams</li><li>Case Study</li></ul>	<ul><li>Exams</li><li>Written Assignments</li><li>Group Presentations</li></ul>	<ul><li>Exams</li><li>Written Assignments</li><li>Group Debates</li></ul>

Goal 4: Develop key skills for communication and writing

	4A. Clearly summarize, assess, and cite empirical evidence and theoretical perspectives, including describing methodology, results, limitations, and implications for a broader audience	4B. Formulate clear written arguments and substantively defend them with empirical evidence	4C. Present clear evidence-based arguments orally in ways that facilitate communication across a range of academic and non- academic audiences
Course(s) Targeting Subgoal	EDHD 201 — Learning How to Learn EDHD 231 – Inside 21st Century Creativity EDHD 310 – Your Brain on Education: The Neuroscience of Learning and Development EDHD 402 – Social Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 426 – Cognition and Motivation in Reading EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 231 – Inside 21st Century Creativity EDHD 310 – Your Brain on Education: The Neuroscience of Learning and Development EDHD 390 – Career Paths in Human Development EDHD 402 – Social Development EDHD 411 – Child Growth and Development EDHD 413 – Adolescent Development EDHD 414 – Development of the Scientific Mind Across the Lifespan EDHD 420 – Cognitive Development and Learning EDHD 425 – Language Development and Reading Acquisition EDHD 426 – Cognition and Motivation in Reading EDHD 460 – Educational Psychology	EDHD 201 – Learning How to Learn EDHD 231 – Inside 21st Century Creativity EDHD 310 – Your Brain on Education: The Neuroscience of Learning and Development EDHD 402 – Social Development EDHD 413 – Adolescent Development EDHD 425 – Language Development and Reading Acquisition EDHD 426 – Cognition and Motivation in Reading EDHD 460 – Educational Psychology
How Sub-goal is Assessed	<ul> <li>Final Project Multimedia Presentations</li> <li>Group Presentations</li> <li>Written Assignments</li> </ul>	<ul><li>Written Assignments</li><li>Exams</li><li>Group Presentations</li></ul>	<ul> <li>Final Project Multimedia Presentations</li> <li>Group Presentations</li> <li>Case Study Presentation</li> </ul>

### **Goal 5: Develop key professional skills**

	5A. Apply both specific knowledge in human development as well as general critical thinking, scientific literacy, and communication skills to career goals	5B. Organize, execute, and manage complex, multi-step research and writing projects	5C. Develop meaningful, purposeful, and realistic career goals for professional life postgraduation
Course(s) Targeting Subgoal	EDHD 4AA – Pro-seminar in Human Development EDHD 390 – Career Paths in Human Development EDHD 426 – Cognition and Motivation in Reading	EDHD 306 – Research Methods EDHD 390 – Career Paths in Human Development EDHD 411 – Child Growth and Development EDHD 425 – Language Development and Reading Acquisition EDHD 426 – Cognition and Motivation in Reading EDHD 460 – Educational Psychology	EDHD 4AA – Pro-seminar in Human Development EDHD 390 – Career Paths in Human Development
How Sub-goal is Assessed	<ul><li>Written Assignments</li><li>Exams</li></ul>	Written Assignments	Written Assignments

### Appendix C: Faculty Bios

Faculty Info	Faculty Bio
Alexander, Patricia	A former middle-school teacher, Dr. Alexander received her reading specialist
Ph. D.	degree from James Madison University in 1979 and her Ph.D. in reading from
University of	the University of Maryland in 1981. Her research focuses on literacy and
Maryland, College	reading comprehension, learning and academic development, critical and
Park	relational reasoning, epistemic beliefs, and expertise. After completing her
Professor;	Ph.D., she joined the faculty at Texas A&M University before returning to
Educational	UMD as a professor in 1995. Her honors include the Oscar S. Causey Award for
Psychology	outstanding contributions to literacy research from the National Reading
Specialization	Conference (2001), the E. L. Thorndike Award for Career Achievement in
palexand@umd.edu	Educational Psychology from APA Division 15 (2006), and the Sylvia Scribner
(301) 405-2821	Career Award from AERA Division C (2007). She has also received university-
(301) 103 2021	level honors for both her teaching and her research.
	Recently named as one of the most influential educational psychologists of the
	past decade (Patterson-Hazly & Kiewra, 2012), Dr. Alexander has served as
	President of Division 15 (Educational Psychology) of the APA, Vice-President of
	Division C (Learning and Instruction) of AERA, and Past-President of the
	Southwest Educational Research Association. Since receiving her Ph.D., Dr.
	Alexander has published over 270 articles, books, or chapters in the area of
	learning and instruction. She has also presented over 400 invited addresses or
	papers at national and international conferences. She currently serves as the
	senior editor of Contemporary Educational Psychology, was past editor of
	Instructional Science and Associate Editor of American Educational Research
	Journal-Teaching, Learning, and Human Development, and presently serves on
	over 10 editorial boards including those for Learning and Instruction,
	Educational Psychologist, and the Journal of Educational Psychology.
Polgor Donald	
Bolger, Donald Ph. D.	Donald J. Bolger, Assistant Professor of Human Development & Quantitative Methodology, studies how the brain learns to read and what are the cognitive
University of	and neural bases of reading and language ability and disability. The core of his
Pittsburgh	
_	laboratory's research focus is on these key issues of reading from neurobiological, cognitive, developmental and educational perspectives.
Associate Professor;	
Developmental	Reading is a complex cognitive skill that requires that small complex visual
Science Program & Educational	forms (letters) be accurately recognized and integrated with linguistic
	information from sound and meaning with the ultimate purpose of achieving
Psychology	comprehension. Thus, typical and atypical reading and language ability may be
Specialization	reflected in quite heterogeneous patterns of cortical activation stemming
djbolger@umd.edu	from visual, auditory or supramodal processing regions.
(301) 405-9103	Dr. Bolger employs multiple methods in structural and functional MRI to
	understand the dynamics of cortical networks in skilled and disabled readers,
	including functional connectivity analyses and diffusion imaging. Dr. Bolger's
	lab is increasingly focusing on how the effects of intervention are reflected in
	cortex, specifically using executive function and working memory training
	paradigms. From school-based and cross-sectional paradigms to online adult
	training tasks, our work combines innovative and complex methodologies the
	combine MRI with event-related potentials (ERP) to understand development
	and learning.
	Dr. Bolger is an affiliate of the Center for Advanced Study of Language
	(casl.umd.edu) and a founding member of the Maryland Neuroimaging Center

Butler, Lucas
Ph.D.
Stanford University
Assistant Professor;
Developmental
Science Program
lpbutler@umd.edu
(301) 314-1815

(mnc.umd.edu)

Dr. Butler's research program explores the nuanced interplay between two critical components of early learning: the capacity to learn important information about the world by making inductive inferences on the basis of limited evidence, and the ability to flexibly and selectively learn from others. By investigating this interplay across several important areas of learning—causal reasoning, inductive generalization, categorization, and normative judgment—as well as over the course of development, he is working to generate broad conclusions about how early cognitive development is fundamentally shaped both by the social context in which it occurs, and by children's developing social cognitive capacities.

Prior to joining the department, Dr. Butler completed his Ph.D. in Psychology

Prior to joining the department, Dr. Butler completed his Ph.D. in Psychology from Stanford University, and was an Alexander von Humboldt Postdoctoral Fellow at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany.

Cabrera, Natasha Ph. D. University of Denver Professor; Developmental Science Program ncabrera@umd.edu (301) 405-2827 Natasha Cabrera Natasha Cabrera received her Ph.D. in Educational and Developmental Psychology from the University of Denver and her MA degree from the University of Toronto. Dr. Cabrera joined the University of Maryland faculty in 2002 and arrived with several years of experience as an SRCD Executive Branch Fellow with the National Institute of Child Health and Human Development (NICHD).

Her current research topics include: father—child and mother—child relationships, predictors of adaptive and maladaptive parenting, children's social and emotional development in different types of families and cultural /ethnic groups, and, the mechanisms that link early experience to children's later cognitive and social development.

She has published in peer–reviewed journals on policy, methodology, theory and the implications of minority fathers' and mothers' parenting on children's cognitive and social development. She is the co-editor of the Handbook of Father Involvement: Multidisciplinary Perspectives, second edition (2012), and two co-edited volumes entitled Latina/o Child Psychology and Mental Health (2011). She won the National Council and Family Relations award for Best Research Article regarding men in families in 2009.

Dunbar, Kevin
Ph. D.
University of
Toronto
Professor;
Developmental
Science Program &
Educational
Psychology
Specialization
kndunbar@umd.edu
(301) 405-7233

Kevin Niall Dunbar is Professor of Human Development and Quantitative Methodology at the University of Maryland College Park. He received his Bachelor's and Master's degrees from the National University of Ireland (Dublin) and his PhD from the University of Toronto. Professor Dunbar conducts research on the ways that children, students, artists and scientists think, reason, create and understand the world. He has investigated, children's learning, undergraduate student learning, and scientists creating new ideas -he has even investigated politicians! He focuses on reasoning strategies involved in analogy, causality, creativity, concept discovery and how these strategies are used by children, students, and scientists. He uses three converging methodologies to explore scientific, artistic, and critical thinking. First, he conducts naturalistic observations of scientists in their labs, students in undergraduate laboratory classes, and visitors to museums (usually families). Second, he conducts experiments with students generating theories, creating new concepts, conducting experiments, and interpreting new information. Third, he conducts neuroimaging research on students as they learn about Physics, Chemistry and Biology, as well as creating new ideas

	using analogy and causal thinking. Here, the goal is to discover optimal ways of presenting new concepts so that students can overcome blocks to learning. Specific topics of his research have been the roles of unexpected results in fostering discovery and invention, Gender in the scientific laboratory, and the roles of analogy and causal thinking in discovery and invention. Professor Dunbar has published in the fields of Education, Experimental Psychology, Cognitive Psychology, and Educational Neuroscience. In addition to publications in academic forums, his work has been featured in the New Yorker, WIRED magazine, Time ideas, Slate, and the Washington Post. He regularly speaks in North America, Asia, and Europe on the topics of Creativity, Analogy, and the effects of learning on the brain, and how to improve critical, creative, and scientific thinking across the lifespan.
Fox, Nathan Ph. D. Harvard University Distinguished University Professor; Developmental Science Program fox@umd.edu (301) 405-2816	Infant and Child Temperament; Development of emotion and emotion regulation; Human Developmental Neuroscience; Development of social cognition; Infant social cognition. Areas of Student Supervision: Infant cognitive/social development; Developmental Psychopathology; Human Developmental Neuroscience.
Hancock, Gregory Ph. D. University of Washington Professor; Measurement, Statistics and Evaluation UM Distinguished Scholar-Teacher ghancock@umd.edu (301) 405-3621	structural equation models; latent growth models; latent variable experimental design and analysis
Harring, Jeff Ph.D. University of Minnesota Associate Professor; Measurement, Statistics and Evaluation harring@umd.edu (301) 405-3630	Dr. Harring is Associate Professor of Measurement, Statistics, and Evaluation (EDMS) in the Department of Human Development and Quantitative Methodology at the University of Maryland. Prior to joining the the EDMS faculty in the fall of 2006, Dr. Harring received a M.S. degree in Statistics in 2004, and completed his Ph.D. in the Quantitative Methods Program within Educational Psychology in 2005both degrees coming from the University of Minnesota. Before that, Dr. Harring taught high school mathematics for 12 years.  Dr. Harring teaches a variety of graduate-level quantitative methods courses including: General Linear Models I & II, Statistical Analysis of Longitudinal Data, Statistical Computing and Monte Carlo Simulation, Multivariate Data Analaysis and Finite Mixture Models in Measurement and Statistics.  Dr. Harring's research interests focus on applications of (i) statistical models for repeated measures data, (ii) linear and nonlinear structural equation models, (iii) multilevel models and (iv) statistical computing.

Jiao, Hong Ph.D. Florida State University Associate Professor; Measurement, Statistics and Evaluation hjiao@umd.edu (301) 405-3627	I am an Associate Professor in Measurement, Statistics and Evaluation in the Department of Human Development and Quantitative Methodology at the University of Maryland. I joined the faculty of EDMS in Fall 2007 after working as a psychometrician on K-12 state assessment programs for about four years.
Jones-Harden, Brenda Ph.D. Yale University Associate Professor; Developmental Science Program bjharden@umd.edu (301) 405-2580	development of maltreated foster, prenatally drug-exposed, and other children at-risk; prevention science and program evaluation
Killen, Melanie Ph.D. University of California, Berkeley Professor; Developmental Science Program mkillen@umd.edu (301) 405-3176	Melanie Killen is Professor of Human Development and Quantitative Methodology, Professor of Psychology (Affiliate), and the Associate Director for the Center for Children, Relationships, and Culture at the University of Maryland. She has received funding from the National Institute of Child Health and Human Development (NICHD), and the National Science Foundation (NSF) for her research on children's and adolescents' development. She was awarded the Distinguished Scholar-Teacher Award by the Provost from the University of Maryland for 2008-2009, and the Graduate Mentor of the Year Award as well as the Undergraduate Mentor of the Year Award as well as the University of Maryland.  Dr. Killen is the author of Children and Social Exclusion: Morality, Prejudice and Group Identity (2011) and co-editor of Social Development in Childhood and Adolescence: A Contemporary Reader (2011), and she has co-edited 6 books, including serving as the Editor of the Handbook on Moral Development (2006; 2014), and has published 2 monographs. She has published over 150 empirical journal articles and book chapters, and her book on morality in everyday life won the outstanding book award from the American Educational Research Association. Dr. Killen served as an expert witness in a school desegregation case, and helped prepare two Supreme Court briefs regarding the impact of school desegregation on children's social development. She has also served as a consultant for a federal initiative on interventions designed to reduce prejudice and to promote inclusion in U.S. elementary schools. Dr. Killen serves on the expert advisory panel for the new National Children's Museum in Washington, D.C., and her research has been profiled in The New York Times, The Washington Post, The Baltimore Examiner, The American Scientist, The Chronicle of Higher Education, American School Board Journal, Teaching Tolerance Magazine, Redbook, Baby Journal, as well as featured on CNN AC360 with Anderson Cooper and Soledad O'Brien for a show on children and

racial bias, which won an Emmy Award. Dr. Killen's research areas of expertise include children's and adolescents' social and moral reasoning, peer relationships, inclusion and exclusion, intergroup relationships and attitudes, prejudice and bias, gender roles, social development, social competence, theory of mind, and the role of school environments on child and adolescent development. Klein, Elisa Dr. Elisa Klein is an associate professor in the Department of Human Ph.D. Development and Quantitative Methodology, where she conducts research in The Pennsylvania child social policy, teacher education and young children's understanding of **State University** their early school experiences, and teaches graduate and undergraduate courses in child development and early education. Society for Research in Associate Professor; Developmental Child Development and American Association for the Advancement of Science Science Program Policy Fellow. Executive branch AAAS policy fellows work in various federal elklein@umd.edu agencies to learn about the federal policy making and the role of science in (301) 405-3122 the policy-making process. Additionally, they and provide scientific expertise to policy makers throughout government. In 2009- 2010 Dr. Klein was an American Association for the Advancement of Science and Society for Research in Child Development Executive Branch Science and Technology Policy Fellow. Executive branch AAAS policy fellows work in various federal agencies to learn about the federal policy making and the role of science in the policy-making process. Additionally, they and provide scientific expertise to policy makers throughout government. While a Fellow, Dr. Klein worked in the Office of Behavioral and Social Sciences Research, in the Office of the Director at the National Institutes of Health in Bethesda, MD. She was also a Visiting Scientist and Child Development Research Fellow in the Research, Demonstration and Evaluation Branch (now part of Office of Planning, Research and Evaluation) of the Administration on Children and Families in the U.S. Department of Health and Human Services during an earlier leave from her academic position. Dr. Klein was the director of the University of Maryland's first child care research and demonstration program, the Center for Young Children. Prior to her positions at Maryland, she was a faculty member at The Ohio State University, Columbus. She has worked extensively with the Maryland State Department of Education in the development of early childhood policies such as universal preschool education, and has been a consultant to many local, non-profit, and governmental agencies, including Head Start, The Children's Defense Fund, the Department of Education, NIH and the National Science Foundation, on a variety of issues related to young children's development and education. Dr. Klein received her B.A. in Psychology with Honors from Kalamazoo College, and her M.S. and Ph.D. in Human Development from The Pennsylvania State University I am a professor of Education in the College of Education at the University of Lissitz, Bob Maryland and Director of the Maryland Assessment Research Center for Ph.D. Syracuse University Education Success (MARCES). I got my degree from Syracuse University's Professor; psychology department with a specialization in measurement and statistics Measurement, and the equivalent of an undergraduate major in mathematics. I took a one Statistics and year post-doc at the Psychometric Laboratory in Chapel Hill and then took an Evaluation academic position with the University of Georgia's psychology department. rlissitz@umd.edu After 8 years and promotion to associate professor, I moved in 1978 to the

(301) 405-3620	College of Education as professor and chairperson. I was the department
(301) 103 3010	chairperson for 26 years and have recently stepped down to return to the life
	of a faculty member. I have had many great experiences as an administrator,
	including chairing the campus Senate back in 1992 and chairing numerous
	campus committees before that time. I have been an Associate Dean for the
	College of Education developing a management information system and
	implementing total quality management efforts. The National Council on
	Measurement in Education and the American Educational Research
	Association have both asked me to chair a number of committees that have
	allowed me to provide a national service function. These include the
	Committee on External Relations, Diversity Relations, and the General
	Committee on Special Interest Groups. Many years ago, I was elected to Chair
	the Special Interest Group on Educational Statistics. For 1998-99, I chaired the
	NCME Awards Committee on Technical Contributions to Measurement
	Practice and in 2005 I chaired their elections committee.
Mix, Kelly	Kelly S. Mix, Ph.D., joined the UMD College of Education as the new chair of
Ph.D.	the Department of Human Development and Quantitative Methodology,
University of	effective on Sept. 1, 2016.
Chicago	A former elementary school teacher, Dr. Mix transitioned to academia early in
Professor and Chair	her career, as she was interested in better understanding how different
kmix@umd.edu	teaching processes work, as well as why some students struggled to learn
(301) 405-5914	concepts that came easily to others. Motivated to conduct research and
	influence policy at a broader level, she obtained a Ph.D. in psychology from
	the University of Chicago.
	Dr. Mix began her career in academia at Indiana University and most recently
	served as a professor in educational psychology at Michigan State University,
	where her work centered on applying the ideas from developmental
	psychology to educational practices. Her current research focuses on the
	development of mathematical cognition and number concepts in young
	children.
Prather, Richard W.	Richard Prather's laboratory investigates children's neurocognitive
Ph.D.	development with a primary focus on cognitive processes relevant to early
University of	mathematics learning. His research program uses neuroimaging,
Wisconsin-Madison	computational modeling and behavioral experimentation to develop
Assistant Professor;	mechanistic explanations of behavior and insights into the relationship
Educational	between children's behavior and neural activity. In addition to laboratory
Psychology	based experiments he also works in schools to develop interventions to
Specialization	improve children's mathematics performance. This multifaceted approach
prather1@umd.edu	allows him to investigate questions in a manner that integrates neuroscience
(301) 405-2806	with developmental theory and important educational applications.
(00-) 100 -000	Prior to joining the university of Maryland Dr. Prather received degrees from
	the University of Wisconsin – Madison (PhD) and MIT (BS).
Ramani, Geetha	Geetha Ramani is an Associate Professor of Human Development and
Ph.D.	Quantitative Methodology. Before coming to the University of Maryland in
University of	2008, Dr. Ramani received her Ph.D. in Developmental Psychology from the
Pittsburgh	University of Pittsburgh and worked as a Postdoctoral Research Associate in
Associate Professor;	Cognitive Development at Carnegie Mellon University.
Developmental	Dr. Ramani's research focuses on understanding how children's social
Science Program &	interactions influence their cognitive development, mainly in the areas of
Educational	mathematics and problem solving. Specifically, Dr. Ramani examines how
Luucational	mathematics and problem solving. Specifically, of Ramail examilies 110W

Psychology
Specialization
gramani@umd.edu
(301) 405-8777

children learn early math and problem-solving skills through play and informal learning activities, such as playing with games and blocks. She also investigates how parent-child interactions, parental beliefs, and the early home environment can contribute to children's development in these areas. Dr. Ramani is also interested in the development and correlates of peer cooperation in young children. Together, Dr. Ramani's work focuses on the benefits and unique processes of learning through cooperation and joint play with adults and peers, and their importance for educational practices with young children.

Rubin, Kenneth Ph.D. Pennsylvania State University Professor; Developmental Science Program krubin@umd.edu (301) 405-0458 Kenneth H. Rubin (B.A., McGill University, 1968; Ph.D., Pennsylvania State University, 1971) is Professor of Human Development and Quantitative Methodology and Founding Director, Center for Children, Relationships, and Culture at theUniversity of Maryland. Rubin's research interests are focused on such topics as social, emotional, and personality development; social competence; social cognition; play; aggression; social withdrawal/behavioral inhibition/shyness; peer relationships and friendship; parenting and parent-child relationships; and cross-cultural studies. Many of his over 300 peer-reviewed publications have been co-authored by colleagues on five continents.

As Director, International Consortium on the Study of Children, Relationships, and Culture (research sites include Australia, Brazil, Canada, China, India, Italy, Korea, Oman, Portugal, and the USA), he and his colleagues have studied social and emotional development from cultural and cross-cultural perspectives. Rubin's current projects include a National Institute of Mental Health funded 12-year longitudinal research project entitled 'Friendship and psychosocial adjustment in middle childhood and adolescence;' a National Institute of Child Health and Human Development funded project 'Social outcomes in pediatric traumatic brain injury;' and a National Institute of Mental Health funded project (with Professor Andrea Chronis-Tuscano, Psychology Department), "A Multi-Component Early Intervention for Socially Inhibited Preschool Children.

Rubin was the elected President of the International Society for the Study of Behavioral Development (1998-2002), an elected member of the Society for Research in Child Development Governing Council (2009-2015), and an elected member of the American Psychological Association, Developmental Psychology Division Executive Board (1987-1990). He has served as Associate Editor of Child Development (1981-1984; 1998-2001). In addition, he has been a member of the National Institute of Child Health and Human Development study section on Human Development and Aging as well as the National Institute of Mental Health's study section on Risk and Prevention. Rubin is a Fellow of the American and Canadian Psychological Associations, the Association of Psychological Science, and the International Society for the Study of Behavioral Development. Among his honors are the Society for Research in Child Development Award for distinguished Contributions to Understanding International, Cultural and Contextual Diversity in Child Development; the International Society for the Study of Behavioral Development Award for Distinguished Contributions to the International Advancement of Research and Theory in Behavioral Development; the Developmental Psychology Mentor Award of the American Psychological Association; the Pickering Award for Outstanding Contribution to

	Developmental Psychology in Canada; and the Killam Research Fellowship (Canada Council)
Stapleton, Laura Ph.D. University of Maryland Associate Professor; Measurement, Statistics and Evaluation Istaplet@umd.edu	Laura M. Stapleton is an Associate Professor in Measurement, Statistics and Evaluation (EDMS) in the Department of Human Development and Quantitative Methodology at the University of Maryland. Additionally, she serves as the Associate Director of the Research Branch of the Maryland State Longitudinal Data System Center. She joined the faculty of EDMS in Fall 2011 after being on the faculty in Psychology at the University of Maryland, Baltimore County and in Educational Psychology at the University of Texas, Austin.
(301) 405-1933	Each year she serves on the faculty of the National Center for Education Research (NCER) funded Summer Research Training Institute on Cluster Randomized Trials at Northwestern University.
	Prior to earning her Ph.D. in Measurement, Statistics and Evaluation from the University of Maryland in 2001, she was an economist at the Bureau of Labor Statistics and, subsequently, conducted educational research at the American Association of State Colleges and Universities and as Associate Director of institutional research at the University of Maryland.
Sweet, Tracy Ph.D. Carnegie Mellon University Assistant Professor; Measurement, Statistics and Evaluation tsweet@umd.edu (301) 405-3623	I am an Assistant Professor in Measurement, Statistics and Evaluation in the Department of Human Development and Quantitative Methodology at the University of Maryland. Prior to this appointment, I was in the Department of Statistics at Carnegie Mellon University as a postdoctoral fellow. My degrees include Ph.D. and M.S. in Statistics from Carnegie Mellon University and M.A. in Mathematics from Morgan State University. I also taught high school mathematics for Baltimore County Public Schools.  My research focuses on developing multilevel statistical social network models and on models for interventions on social networks in particular. I am also interested in statistical methodology for large-scale educational interventions
Torney-Purta, Judith Ph.D. University of Chicago Professor; Developmental Science Program & Educational Psychology Specialization jtpurta@umd.edu (301) 405-2806	and recently started studying teacher rating models.  social/political cognition; civic education cross-nationally; cross-cultural and inter-cultural studies; research related to social policy; Interaction in technology-rich environments; social studies and history learning. Areas of Student Supervision: Social development and social cognition (pre-school through adult); applied cognitive psychology; gender roles; cross-cultural and inter-cultural studies; research related to social policy; social studies and history learning. Due to expected retirement in June 2015 I am not accepting new students, though I continue to teach, publish with students and serve on committees for doctoral students.
Wang, Min Ph.D. Ontario Institute for Studies in Education/University of Toronto	Dr. Min Wang received her Ph.D. in Applied Cognitive Science from the University of Toronto in 2000. Upon graduation she completed her post-doctoral training at the Learning Research and Development Center at the University of Pittsburgh, funded by a fellowship from the Social Sciences and Humanities Research Council of Canada. She became a member of the Faculty of Human Development at the University of Maryland in 2002.

Professor;
Educational
Psychology
Specialization &
Developmental
Science Program
minwang@umd.edu
(301) 405-8798

Dr. Wang's research interests are in the area of language and reading development. Specifically, she is interested in how cross language and writing system differences impact learning to speak and read in a first and second language. Her recent work has mainly focused on Chinese-English, Korean-English, Spanish-English bilingual children and adults, funded by NIH/NICHD, NSF, and Spencer Foundation. Dr. Wang is also interested in extending her work to other bilingual populations involving various languages and writing systems in the world.

Dr. Wang has been serving on the editorial boards of Applied Psycholinguistics, Writing Systems Research, Contemporary Educational Psychology, and International Multilingual Research Journal. She has served as the Director of Graduate Studies in her department and the Executive Committee of the NSF-IGERT program at the University of Maryland in Biological and Computational Foundations of Language Diversity. She is a Fellow of the Association of Psychological Science (APS) and Psychonomic Society.

Wentzel, Kathryn Ph.D. Stanford University Professor; Developmental Science Specialization & Educational Psychology Specialization wentzel@umd.edu (301) 405-2810 Kathryn Wentzel is a Professor of Human Development in the Department of Human Development, Learning, and Quantitative Methodology. She received her Ph.D. in Psychological Studies in Education from Stanford University in 1987, after which she held post-doctoral positions at the Center for the Study of Families, Children, and Youth at Stanford and in the developmental psychology program in the Department of Psychology at the University of Illinois, Urbana-Champaign.

Dr. Wentzel's research examines the social correlates and antecedents of adolescent motivation and achievement. This work includes a focus on the nature of teacher-student relationships and teacher supports as predictors of young adolescents' goal pursuit, prosocial behavior, and academic performance. A related strand of her work has examined peer relationship configurations (peer status, peer networks, and friendships) and supports (e.g., emotional support from peers) as predictors of these same outcomes. Her research is school-based, relies on a variety of research methods, and focuses on adolescent students from diverse backgrounds. Dr. Wentzel has published over 100 articles and book chapters based on this work andhas coedited books on achievement motivation, Social motivation: Understanding children's school adjustment (1996), and Handbook of motivation at school (2009; 2015), and social influences on school outcomes, Handbook of Social Influences in School Contexts: Social-Emotional, Motivation, and Cognitive Outcomes. She is currently editor of Educational Psychologist and past editor of the Journal of Applied Developmental Psychology. Dr. Wentzel is past Vice-President of Division E (Counseling and Human Development, AERA), past Interim Chair of HDQM, and has Fellow status in the American Psychological Association, Division 15, and American Educational Research Association, Division E.

Wigfield, Allan Ph.D. University of Illinois, Urbana Professor; Developmental Science Program & Dr. Wigfield is Professor, Distinguished-Scholar Teacher, and Director of Human Development Graduate Studies in HDQM. He also is an Honorary Faculty Member in Psychology at the University of Heidelberg, Germany. He received his Ph. D. in educational psychology from the University of Illinois, and then went to the University of Michigan on a postdoctoral fellowship in developmental psychology. His research interests concern the development of children's achievement motivation, children's motivation for reading and how

Educational Psychology Specialization awigfiel@umd.edu (301) 405-2809	it is influenced by different reading instructional practices, and gender differences in achievement motivation.  Dr. Wigfield has authored more than 130 peer-reviewed journal articles and book chapters on children's motivation and other topics, including the chapter on the development of motivation in the Handbook of child psychology (6th and 7th editions). He was Associate Editor of the Journal of Educational Psychology from 2000 to 2002 and Associate Editor of Child Development from 2001 to 2005. He was editor of the teaching, learning, and human development section of the American Educational Research Journal from 2007-2010. Dr. Wigfield has one awards for his research and also for his
Vang li Coung	teaching  Dr. Vang is an Assistant Professor of Measurement, Statistics, and Evaluation
Yang, Ji Seung Ph.D.	Dr. Yang is an Assistant Professor of Measurement, Statistics, and Evaluation (EDMS) in the Department of Human Development and Quantitative
University of	Methodology at the University of Maryland. Before joining the EDMS faculty in
California – Los	the fall of 2013, Dr. Yang worked as a postdoctoral researcher at University of
Angeles	California - Los Angeles (UCLA) where she received her Ph.D. in the Social
Assistant Professor;	Research Methodology Program (focus: Advanced Quantitative Methods in
Measurement,	Educational Research) within the School of Education and Information Studies
Statistics and	in 2012. Prior to joining UCLA, she earned her M.A. and B.A. in Education at
Evaluation	Yonsei University, Korea.
jsyang@umd.edu	Dr. Yang's research interests focus on measurement and advanced
(301) 405-6073	quantitative research methods in social sciences. The research interests
	encompass 1) development of statistical models that incorporate
	measurement errors in the frameworks of Item Response Theory,

model with efficient computation.

Generalizability Theory, Hierarchical Linear Modeling, and Latent Variable Modeling, and 2) development of multilevel/multidimensional item response

## Appendix D: Syllabus for EDHD200

#### EDHD 2AA: THE STUDY OF HUMAN DEVELOPMENT

Paradigms & Perspectives

## Course description

EDHD 2AA is an introduction to the paradigms and perspectives that guide the study of human development across the lifespan in cognitive, social, physical and emotional domains. Topics of study include overlying principles, concepts, assumptions, theoretical frameworks, and research methods that influence ways in which development is conceptualized. The course is designed to provide insight into major questions of the day in human development and how these prevailing perspectives have evolved over time. This course will also help students understand how knowledge of theory and research is translated into practice in a variety of professional settings. EDHD 2AA is a requirement for all students enrolled in the EDHD minor or major undergraduate program.

## Course purpose

This course is intended to help undergraduate students who will be pursuing either a minor or major in Human Development gain foundational knowledge in preparation for advanced coursework in Human Development at the undergraduate level in those programs. It is also appropriate for students from a variety of majors who wish to gain knowledge of the field that will inform their future decisions about potential courses of study and career objectives.

#### Course objectives

#### Students will demonstrate:

- 1. The ability to evaluate the strengths and weaknesses of theories of human development;
- 2. Understanding of the major perspectives and prevailing questions that influence the ways in which development is studied:
- 3. Knowledge of scientific reasoning;
- 4. Understanding of how course concepts are translated into applied tasks in a variety of career contexts.

#### Required readings

*Textbook.* Green, M. & Piel, J.A. (2010). Theories of Human Development (2nd Edition). Boston, MA: Pearson Education, Inc

Supplemental articles. Can be accessed on CANVAS via elms.umd.edu

## **University Policies and Resources**

As a student, you have the responsibility to be familiar with and uphold the *Code of Academic Integrity* and the *Code of Conduct*, as well as for notifying your course instructors in a timely fashion regarding academic accommodations related to absences and accessibility as indicated below.

You also have the right to know the expectations set by University Policy. The University of Maryland values the diversity of its student body and is committed to providing a classroom atmosphere that encourages the equitable participation of all students.

University Policies outlined at this link are particularly relevant to your experience in academic courses: <a href="http://ugst.umd.edu/courserelatedpolicies.html">http://ugst.umd.edu/courserelatedpolicies.html</a>. Topics that are addressed in these policies include academic integrity,

student and instructor conduct, accessibility and accommodations, attendance and excused absences, grades and appeals, copyright and intellectual property.

## Course Requirements

## 1) Exams (total 200 points)

There will be two non-cumulative exams. Each exam is worth 100 points.

Mid Term Exam:	
Final Exam:	

#### 2) Critical thinking papers (total 100 points)

Students will complete *four critical thinking papers*, each worth 25 points, in which they are responsible for analyzing an infant, child, or adolescent development life narrative from each of the four theoretical perspectives covered in Unit 3. Details of this assignment will be distributed in a separate handout during the second week of class.

#### 3) Term paper (total 100 points)

Students will complete a term paper, in which they will demonstrate the ability to apply course concepts to potential career goals and objectives, as they relate to the field of human development. Details of this assignment will be distributed in a separate handout during the fourth week of class.

#### Course Grades

100 points
100 points
100 points
100 points

360-400 points A 320-359 points B 280-319 points C 240-279 points D < 240 points F

Course Schedule

## **Introductory Concepts**

Week 1

The field of Human Development: definition & scope

- The study of Human Development
- Biological stages of maturation
- Cognitive, social, and emotional stages of development

*Instructional goal*: This class introduces students to Human Development as a field of study. We will discuss biological maturation and the dominant role that it plays in shaping cognitive, emotional, and social development. We will also discuss the interactive nature of these domains and how environmental influences further act to determine developmental outcomes. Students will learn how this approach to studying human thought and behavior compares with other traditions and fields.

Week 2 Biological determinants of development

- Evolution & embryology
- Population genetics
- Behavioral genetics
- Developmental neuroscience

*Instructional goal:* This class will include a discussion of how different aspects of biology determine maturation. Specifically, the class will focus on genetics as a determining factor in human growth, behavior, cognition, and emotion. The class will also emphasize the role of the brain in orchestrating the nature of these changes.

Week 3

Environmental influences on development

-Culture

Race, Ethnicity, Cohort, SES

- -Family
- -Peers
- -Ecological factors

*Instructional goal:* This class will include a discussion of how environmental factors affect the maturational processes across domains of development, including an emphasis on cultural, familial, peer and a variety of ecological influences.

Week 4

Central issues & questions

- -Continuous v. discontinuous change
- -Critical windows & sensitive periods
- -Heredity v. environment

*Instructional goal:* This class will include a discussion of the fundamental debates in developmental research and how they persist across a range of domains. These are the concerns that directly and indirectly influence the nature of the questions that human development researchers ask and the types of investigations that are conducted in order to answer them.

#### UNIT 2

#### Principles of Human Development Research

Week 5 Scientific reasoning

-Empiricism: Principles of theory development

Internal consistency

Parsimony

Empirical reliability

Testability
Integration
Predictive power
Explanatory power

-Inductive v. deductive reasoning

*Instructional goal:* This class will focus on an exploration of how theories are derived and the principles of scientific reasoning by which theories are evaluated. We will explore how principles such as Occam's Razor are applied when scientists evaluate competing theories of development.

Week 6 Research designs

- Dependent v. independent variables
- Experimental design
- Cross sectional v. longitudinal design
- Observational/case studies
- Sample characteristics

*Instructional goal:* This class will focus on principles of research design and methods; specifically, those designs and methods that are typically employed in the study of human development. Students will learn how scientists make inferences about development based upon specific properties of their research design.

# UNIT 3 Paradigms & Perspectives

## Week 7 Psychodynamics & Humanistic

- -History
- -Premiere theorists
- -Core concepts
- -Paradigmatic shifts/contemporary incarnations
- -Implications for human development

## Week 8 Behavioral & Cognitive

- -History
- -Premiere theorists
- -Core concepts

-Paradigmatic shifts/contemporary incarnations

-Implications for human development

Week 9 Contextual

-History

-Premiere theorists
-Core concepts

-Paradigmatic shifts/contemporary incarnations

-Implications for human development

Week 10 Evolutionary

-History

-Premiere theorists-Core concepts

-Paradigmatic shifts/contemporary incarnations

-Implications for human development

*Unit 3 Instructional goal:* These classes will focus on four fundamental perspectives on human development that underlie the body of work that emerges from the field. Students will understand how growth and development can be explained from a variety of theoretical approaches, and how these approaches have evolved over the course of history via paradigmatic shifts in our understanding.

Week 11 Thanksgiving/Spring Break

# UNIT 4 Applied Aspects

Week 12 Understanding developmental disabilities and psychopathology

- Autistic spectrum disorder

-Cognitive disabilities

Developmental delays

-Physical disabilities

Muscular & skeletal disorders

-Emotional trauma

Neglect, abuse, violence

*Instructional goal:* This class will focus on a variety of disorders that occur during the course of human development. These disorders have the potential to affect biological, cognitive, and socio-emotional development. Students will explore contemporary explanations for the root causes of these disorders and how environments contribute to either the exacerbation or amelioration of these conditions.

Week 13 Employment perspectives

-educators

-health care workers

- -government/NGO/policy consultants
- -research
- -therapeutic staff support
- -counseling/social work
- -law enforcement

# Instructional goal:

How do people from different professions access and apply the knowledge of HD in their work?

Week 14 Final Examination

DATE: 5/15/18

TO: Lucas P. Butler

Department of Human Development & Quantitative Methodology

FROM: On behalf of the University of Maryland Libraries:

Tahirah Akbar-Williams, College of Education & African American Studies Librarian

Maggie Saponaro, Head of Collection Development

Daniel Mack, Associate Dean, Collection Strategies & Services

RE: Library Collection Assessment

We are providing this assessment in response to a proposal by the Department of Human Development & Quantitative Methodology in the College of Education to create a Bachelor of Science in Human Development. The Department of Human Development & Quantitative Methodology asked that we at the University of Maryland Libraries assess our collection resources to determine how well the Libraries support the curriculum of this proposed program.

## **Serial Publications**

The University of Maryland Libraries currently subscribe to a large number of scholarly journals—almost all in online format--that focus on human development, child & infant development, learning methodologies, brain development, research methods, and diversity and culture.

The Libraries subscribe to most of the top ranked journals that are listed in the your subject category in the Social Sciences Edition of *Journal Citation Reports*. \* These journals include the following, all of which are available online:

- Brain and Language, Elsevier
- Educational Psychologist, Taylor and Frances
- Review of the Educational Research, Sage
- Sociology of Education, Sage
- Learning and Instruction, Elsevier Science
- Educational Research Review, Taylor and Frances
- Early Childhood Research, Harvard Graduate School
- Human Development, Karger

Articles in journals that we do not own likely will be available through Interlibrary Loan/Document Delivery.

\*Note: *Journal Citation Reports* is a tool for evaluating scholarly journals. It computes these evaluations from the relative number of citations compiled in the *Science Citation Index* and *Social Sciences Citation Index* database tools.

#### **Databases**

The Libraries' *Database Finder* (<a href="http://www.lib.umd.edu/dbfinder">http://www.lib.umd.edu/dbfinder</a>) resource offers online access to databases that provide indexing and access to scholarly journal articles and other information sources. Students and faculty should first refer to their Research/Subject Guide (<a href="http://lib.guides.umd.edu/education">http://lib.guides.umd.edu/education</a>) to learn how to access and search the list of core and supplemental databases and other important materials in Education. Many of these databases cover subject areas that would be relevant to this proposed program. Databases that would be useful in the field of Human Development are Web of Science, ScienceDirect, Education Source, Eric, PsycINFO, SocINDEX, and PsycARTICLES. Some of the other subject databases that would be relevant to this curriculum include Sociological Abstracts, Psychology & Behavioral Sciences Collection, and Education Index Retrospective.

In addition, three general/multidisciplinary databases, Academic Search Complete, JSTOR and Project MUSE are good sources of articles relevant to this topic.

In many-and likely in most--cases, these indexes offer full text copies of the relevant journal articles. In those instances in which the journal articles are available only in print format, the Libraries can make copies available to graduate students either through the Libraries' Scan & Deliver Program (http://www.lib.umd.edu/access/scan-deliver) or via Interlibrary Loan. (Note: see below.)

## Monographs

The Libraries regularly acquire scholarly monographs in Human Development and allied subject disciplines. Monographs not already part of the collection can usually be added upon request.

Even though most library research for this program likely will rely upon online journal articles, students may wish to supplement this research with monographs. Fortunately, more and more monographs are available as e-books. Even in instances when the books are only available in print, graduate students will be able to request specific chapters for online delivery through the Libraries' Scan & Deliver program (Note: see below).

A search of the University of Maryland Libraries' WorldCat UMD catalog was conducted, using a variety of relevant subject terms. This investigation yielded a sizable list of citations of books that we own under the subject term *Child Development*, the catalog yielded 78,000 titles. A further search revealed that the Libraries' membership in the Big Ten Academic Alliance (BTAA) had a list of holdings and citations of roughly 13,000 titles. Another search was conducted using the subject term *Educational Psychology* returned 300,000 titles and from the Libraries' membership in the Big Ten Academic Alliance (BTAA) it generated 200,000.

As with our own materials, graduate students can request that chapters be copied from these BTAA books if the books are not available electronically.

## Scan & Deliver and Interlibrary Loan

These services offer online delivery of bibliographic materials that otherwise would not be available online. As a result, remote users who take online courses may find these services to be helpful. Scan & Deliver and Interlibrary Loan are available free of charge.

The Scan & Deliver service scans and delivers journal articles and book chapters within three business days of the request--provided that the items are available in print on the UM Libraries' shelves or in microform. In the event that the requested article or chapter is not available on campus, Scan & Deliver will automatically refer the request to Interlibrary Loan (ILL). Interlibrary Loan is a service that enables borrowers to obtain online articles and book chapters from materials not held in the University System of Maryland.

#### Additional Materials and Resources

In addition to serials, monographs and databases available through the University Libraries, students in the proposed program will have access to a wide range of media, datasets, software, and technology. Library Media Services (<a href="http://www.lib.umd.edu/lms">http://www.lib.umd.edu/lms</a>) houses media in a variety of formats that can be utilized both on-site and via ELMS course media. GIS Datasets are available through the GIS Data Repository (<a href="http://www.lib.umd.edu/gis/dataset">http://www.lib.umd.edu/gis/dataset</a>) while statistical consulting and additional research support is available through the Research Commons (<a href="http://www.lib.umd.edu/rc">http://www.lib.umd.edu/rc</a>) and technology support and services are available through the Terrapin Learning Commons (<a href="http://www.lib.umd.edu/tlc">http://www.lib.umd.edu/tlc</a>).

The subject specialist librarian for the discipline is Tahirah Akbar-Williams (takbarwi@umd.edu) also serves as an important resource to programs such as the one proposed.

#### Other Research Collections

Because of the University's unique physical location near Washington D.C., Baltimore and Annapolis, University of Maryland students and faculty have access to some of the finest libraries, archives and research centers in the country vitally important for researchers in Human Development. These include the Library of Congress, the National Archives, National Library of Medicine, and the Smithsonian to name just a few.

#### Conclusion

With our substantial journals holdings and index databases, as well as additional support services and resources, the University of Maryland Libraries have resources to support teaching and learning in Human development. These materials are supplemented by a strong monograph collection. Additionally, the Libraries Scan & Deliver and Interlibrary Loan services make materials that otherwise would not be available online, accessible to remote users in online courses. As a result, our assessment is that the University of Maryland Libraries are able to meet the curricular and research needs of the proposed Bachelor of Science in Human Development.



Dr. Michael Dougherty, Chair Department of Psychology College Park, Maryland 20742-4411

September 13, 2018

To the Committee on Programs, Courses, and Curriculum:

We have reviewed the proposal for an Undergraduate Major in Human Development from the Department of Human Development & Quantitative Methodology. We have worked with their faculty to mitigate any impact on the enrollment in our courses and our major. While we do not believe that the proposed major in Human Development will have a major impact on enrollment within psychology, this has been one of our main points of discussions. Psychology currently has roughly 1100 majors, and is currently in the process of establishing a new major in Neuroscience that will be administered jointly with Biology. We expect that the NEUR major will shift our enrollment numbers in PSYC somewhat, but we are not expecting extraordinary changes. Likewise, our assessment is that the proposed major in Human Development will not have a major impact on PSYC enrollment or number of majors. HDQM faculty have assured us that they will work with us in the future to ensure the health and success of both of our programs. Therefore, we support the current proposal to establish the HD major.

Sincerely,

Michael Dougherty, Ph.D.

Michael Dougherty

Professor and Chair



Department of Family Science

4200 Valley Drive, Suite 1142 College Park, Maryland 20742 301.405.3672 TEL 301.314.9161 FAX fmsc@umd.edu www.sph.umd.edu/fmsc

To: UMD Committee on Programs, Courses, and Curriculum

From: Sandra Crouse Quinn, Chair, Department of Family Science

Re: Proposal for a new major in Human Development

Date: September 13, 2018

We have reviewed the Proposal for an Undergraduate Major in Human Development from the Department of Human Development & Quantitative Methodology. We confirm our agreement to have the following courses in FMSC listed as electives in the proposed major:

#### **FAMILY SCIENCE ELECTIVES**

FMSC 105 Individuals in Families

FMSC 290 Family Economics Restricted to FMSC majors and non-majors with less than or equal to 60 credits

FMSC 330 Family Theories and Patterns

FMSC 332 Children in Families

FMSC 430 Gender Issues in Families

FMSC 431 Family Crises and Intervention

FMSC 452 Family Policy Analysis

FMSC 460 Violence in Families

FMSC 480 Work and Family Issues

FMSC 497 The Child and the Law

As a department, we have appreciated the willingness of the faculty to work with us to mitigate any impact on the enrollment in our courses and our major. The HDQM faculty has also provided assurances that they will work with us in the future to ensure the health and success of both programs, and we are certainly willing to work collaboratively to ensure the success of our programs and our students. Therefore, we support the current proposal to establish the HD Major.