# **INDS Academic Program Review - 2018**

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#### **EXECUTIVE SUMMARY**

**Overview:** During the period covered by this self-study, INDS has navigated through a broad range of external and internal factors that redefine where, how and in what context the program operates. As a result, the program has refined all major aspects of its operations (teaching, advising, staffing, research). All adjustments have been made with a focus on the unchanging purpose for the program was originally created. This purpose is to provide students with an opportunity to earn their undergraduate degree by designing a unique course of study that serves their post-graduation goals better than UMBC's current roster of degree-granting programs. Exemplifying this evolution, the program is currently in the final stages of seeking permission to change its name from Interdisciplinary Studies to Individualized Study. On a practical note, this incipient change informs the decision to refer to the program throughout this self-study by the (unchanging) acronym, INDS.

A central goal for this self-study is inviting reviewers to help us consider carefully how to optimize the future now made possible. To this end, specific questions are framed throughout the document, and are summarized below in terms of the categories under which we have been asked to organize this self-study. Other questions and insights are, of course, warmly invited.

Assessment: Assessment has advanced significantly, especially with a recent development of a curriculum map and subsequent progress in aligning key rubrics. This activity is paving the way for near-future collection of data that will be easier to interpret than anything available previously. Our primary question here is how we might best handle small student numbers when measuring and reporting direct assessment? In particular, how do we avoid losing the relative power of qualitative assessment when asked to show quantitative data?

**Curriculum:** Assessment of student success, particularly using capstone research project outcomes as a proxy for the degree, led to significant expansion of the INDS core curriculum. Changes initially strengthened individual elements of the curriculum (addition of new courses, expansion of existing courses to provide more time for student development). A second cycle of assessment has more recently been integrating all courses, old and new, into a single coherent whole. This has involved an increased involvement by all core INDS staff in all aspects of the curriculum. At the time of writing, several non-required courses remain to be assimilated meaningfully into this overall picture. Beyond this, the program is now eager to explore how it can become more accessible to transfer students who make up a substantial fraction of UMBC's undergraduate population. How can we best serve students who arrive at UMBC on an intended timeline to graduation that is a tight fit for the current required course sequence?

**Faculty And Staff Profile:** INDS is a unit comprised primarily of professional staff. Involvement with the program by full time lecturers and tenure-track professors is limited to two, indirect fronts: membership of the Interdisciplinary Studies Committee (ISC) and mentorship of an individual student. Adjunct faculty have routinely taught courses for the INDS program, but are rarely involved in mentoring student degrees (and, where this occurs, must be complemented by a member of full-time instructional faculty according to program policy).

For degree mentors and ISC members, relatively small program changes have focused upon clarification of role. More substantial change has reduced the extent to which the INDS curriculum relies upon adjunct instructors. Program staffing has changed primarily by converting a patchwork of part-time positions (including adjunct instructors) into a single, Program Coordinator position. All of these changes reflect a single strategy to increase integration and coherence of the program from the perspective of its students. The major question INDS faces on this front is **how best to navigate an increasingly busy faculty on which it relies for voluntary mentorship**? Further context to this question comes from the observation that many students' specific research (capstone) goals evolve considerably as their degree proceeds, such that student/mentor pairings can become ill-fitted by the time that the degree is nearing completion. We gather from similar programs at other institutions that this is a common problem.

**Faculty/Staff Research:** Relative to our previous APR, INDS staff have been engaged in a wide variety of research and scholarly activity. Of particular note, they have undertaken diverse, funded research activities that explore new ways to integrate academic coursework with co-curricular and extra-curricular activities, including academic advising, degree planning and applied learning. A major question moving forwards is **whether/ how/ where such research activities may be converted into peer-reviewed publications?** A secondary question is whether and how Director Freeland's research activities regarding life's origins/astrobiology can be integrated usefully with the program.

**Teaching:** INDS lacks formal incentive structures to encourage high quality teaching. To mitigate, instructors are encouraged to attend and participate in workshops/panels and other collaborative activities with colleagues from similar programs outside UMBC. Recently, the program has begun to explore direct collaborations with research organizations such as Braintrust and KnowInnovation that deliberately blur lines between teaching and research in a way that energizes both instructors and students. A major question moving forwards occurs on the different front of how can we best ensure that faculty mentors feel empowered to "teach" their students using the unusual, out-of-classroom settings often implied by this program, and how these opportunities can be systematized to the benefit of all?

**Service:** INDS staff remain active contributors to the broader communities of UMBC and beyond through diverse acts of service, from participation in job searches and committee work to guest lectures, talks and other sharing of skills. The program perceives no particular questions here, but welcomes any changes to this perception.

**Student Profile:** Data indicate clearly that INDS has become more efficient at helping students find a degree which best fits their educational and career goals. Many INDS students root their degree plans in part in STEM fields, which aligns with the overall growth in those areas at UMBC. A major question moving forward is whether and how to nurture this angle of the program's work in order to better serve trends in campus enrollment?

**Student Advising:** The goal of INDS advising is to help students discover the path through the university that best prepares them for their desired careers or graduate school, whether or not this ends up being the INDS degree. A student's choice to remain in this program or transition to another is now formalized by multiple checkpoints within our curriculum. Most notably, INDS 335 has developed to require production of a feasible degree plan, whether for INDS or another major, in order to complete the course successfully. This complements traditional advising (outside of the classroom) in a way that is growing within the program. Indeed, program staff have shifted to a collaborative, team based approach to advising in order to provide an important assessment opportunity by identifying specific students who are facing

challenges. The program perceives no specific questions beyond a general invitation for further ideas for improvements.

**Student Research:** Since long before the period covered by this self-study, student research has been required for the "capstone" experience that ends the degree (INDS490). External validation for the quality of student research comes in many forms, including competitive Undergraduate Research Awards (URA's), and peer-reviewed publications lead-authored by program undergraduates. Much of the program's curricular development has focused on providing better scaffolding for *all* students to prepare more of them to achieve this level of quality. Of particular note, a guided reading course (INDS 399) was added in 2014 to complement and prepare students for the capstone planning seminar (INDS 480) which they take in their penultimate semester. A major question moving forwards is **how best to balance the scaffolding needed for students to graduate quickly**?

**Facilities:** An account of facilities for the program is dominated by physical relocation of the program to its current location at the mid-point of the period covered by this self-study. This move brought some significant improvements, such as the strong perception by staff that the program's new location provides better connections to broader campus activity. Set against these benefits are three, overlapping areas in which we perceive that the new location has worsened the program's facilities: (1) the program provides no dedicated area for students to mingle and/or work; (2) the new location provides significantly reduced storage space; (3) (most significant in our perception) the new location provides no conference room for the extensive program activities that occur beyond formal, classroom activity ("triangle meetings," ISC meetings, Council of Majors meetings, capstone presentations and so forth.) Unconnected to the move and less specific to the program, INDS still has no clear access to appropriate (low-tech) maker-space for applied learning initiatives, such as the Kinetic Sculpture. The program welcomes input on **how might these issues of facilities be addressed most effectively?** 

**Climate:** The Interdisciplinary Studies program offers a wide variety of ways to integrate the students, faculty and staff involved with the program. Current student numbers enable INDS to provide a sustained personal relationship appropriate to this type of program through advising, seminar-style classes, and longitudinal assessment. Team teaching and collaborative advising enhance this strength. Beyond their mentors, students are connected to faculty through the Interdisciplinary Studies Committee (ISC) as it reviews each degree plan and offers personalized feedback to the student about potential improvements. Additional, extra-curricular groups such as the Council of Majors, Herbert Run Greenway, Kinetic Sculpture team, and Living Learning Community provide stronger relationships to the UMBC community. A longstanding question for the program is what more it can do to encourage positive, healthy relationships between past, present and potential future faculty mentors?

**Profile Of Graduates:** A powerful theme that emerges from surveys of our young alumni is that their INDS degree prepared them well for a variety of graduate school and career challenges. Not only do they comment on the importance of being able to find connections and common ground where others see conflicts, but graduates also stress the high quality of their university education that puts them on a level playing field with graduates from elite U.S. institutions. As one 2017 graduate wrote: "*I am now in a program where my peers hail from the* 

most prestigious institutions in the country -- Yale, Stanford, Cornell, etc. -- yet I feel, with certainty, that I am an equal." Successful attainment of post-graduation goals remains a strength of the program, and we simply welcome insights from the reviewers on this topic.

**Budget:** The budget for this program has not increased over the period covered by this self-study other than one cost of living adjustment to salaries and various one-time monies generated by research funding. The program has therefore worked to reconcile the number of students it serves, the courses it teaches, the advising it offers, the staffing it provides and all other activities into a total expenditure that matches our total income while maximizing the success of its students. In this sense, the the program is satisfied with its current budget, providing no major changes occur moving forward (such as a significant increase in students). Should such changes occur, the program will have to either scale back its course offerings, increase class sizes or receive a higher budget. Our only question for reviewers is for advice on how we might best incorporate into base funding a small (but significant) component of the stabilized budget that arrives in the form of encumbered funds, granted upon request at the end of each fiscal year?

**Evaluation:** As this APR arrives, the program has adapted successfully to deep shifts in the climate and conditions under which it operates. INDS emerges more efficient and more integrated. The most salient statistics supporting this perception are that student enrollments have declined significantly, as have the numbers of degree proposals approved, while that the number of graduating seniors has remained constant and their success remains noteworthy. Emerging data from INDS335 show directly that the program is guiding well-fitted students into the degree, while simultaneously redirecting others to appropriate alternative majors in a timely fashion. Beyond this focus on student outcomes, by maintaining focus on its original mission, the program has arrived at a point of stability beyond that of any other point in the past six years.

Beyond the specific questions listed above, the culmination of this progress is that, in the absence of further significant perturbation, the program is situated to start collecting cleaner, more fine-grained data about its activities than ever before. These data will inform not only the strengths and weaknesses of the program, but offer potential value to the UMBC community at large: what trends in student interest is INDS seeing? What tools and assessments are helping students achieve the metacognition necessary to take control of their undergraduate education? Other horizons are opened up to the newly stabilized program, including the service role that INDS could potentially play to non-majors.

**Future Directions:** We project a steady state model for the foreseeable future of INDS in which all program activities are tailored to support 60 majors and approximately 20 non-majors at any given time using the current budget. Two main, interrelated themes dominate the vision and future goals for the program: (1) continuing to develop program specialization and (2) thereby developing the program's relevance to UMBC's mission. Program specialization is leading us into frontier territory where researchers and funding agencies are starting to show interest in what we can learn, through our students, about using current structures of higher education to serve the rapidly changing needs of society. This leads us to deep, open question about whether the program can and should rethink its role in serving non-INDS majors, where scaling up activity might be most cost efficient and beneficial to UMBC?

**1. DESCRIPTION OF PROGRAM:** Narrative description of program and its history, including mission, organization, specializations, and relationship to UMBC mission.

#### 1A History of the INDS Program

The INDS program at UMBC was founded in 1969 as *Option II*, to differentiate it from the traditional 13 majors at the time known as *Option I*. The major was created to "*Afford highly motivated, intellectually mature students the opportunity to construct their own academic programs, with the hope that these students might better profit from the experience than from the traditional major programs..."* (Rosenthal, 1972). The original *Option II* brochure stated, "many kinds of programs are possible, limited only by imagination and ingenuity." The program's first director was Dr. Thomas Benson, and in 1979 he renamed the program *Interdisciplinary Studies* in order to better reflect emphasis on integration of knowledge drawn from more than one discipline. Benson's scholarship helped influence the emerging national movement toward integrative, multidisciplinary approaches toward learning and problem solving. (Benson, 1982) He went on to serve (1984-1985) as president of the (then) national *Association of Integrative Studies* (AIS), where he led a similar debate, leading eventually to the organization's name change to the *Association of Interdisciplinary Studies* (Newell, 2008). In 1986, Dr. Benson left UMBC to take up a senior leadership position at St. Andrew's College NC.

Dr. Slobodan Petrovich was appointed as the program's second director in 1987. He continued UMBC's national presence when he was elected to the AIS Board that same year, and was later appointed president for two consecutive terms (1991-1993). Under his leadership, the program added a Bachelor of Science degree in Interdisciplinary Studies in 1992. Dr. Petrovich passed away in 2000.

Assistant Director Patricia La Noue was initially appointed as an interim director and then, in 2002, she was appointed the third director of the program. Director La Noue worked to raise INDS visibility on campus through such university-wide programming as the Mosaic Roundtables, the Petrovich Lectures and the International and Global Studies initiative. Within the program she worked to incorporate a core curriculum of courses based on works by leading scholars of interdisciplinary theory (see *Section 1.4, Program Specialization*). The goal of guiding students' integration of coursework into a coherent whole was strengthened by introducing a requirement that all graduating seniors make formal presentation of their capstone research projects. Director LaNoue remained in her position past her intended retirement date (2012) until the appointment of a successor to ensure leadership continuity. She became the first emerita director of the program.

In June 2013, Dr. Stephen Freeland was appointed as the fourth INDS director. His appointment was the result of the first, major recommendation of the 2011 APR: to hold a national search for a new director. Ensuing history, which covers the majority of this APR, is described here in greater detail for the current academic review and is summarized in Figure 1.1.

Upon assuming program leadership Dr. Freeland was brought into the final stage of negotiations to redirect the program's reporting structure from the Vice Provost for Academic Affairs, Antonio Moreira, to the Vice Provost and Dean of Undergraduate Education, Diane Lee (whose division has since been renamed the Division of Undergraduate Academic Affairs - UAA, Feb 2014). This move entailed the first of three changes in leadership to which the program reports during the period of this APR (Dr. Lee retired in summer 2016, was replaced by interim Vice Provost/Dean Simon Stacey for one year prior to the appointment of Katherine Cole

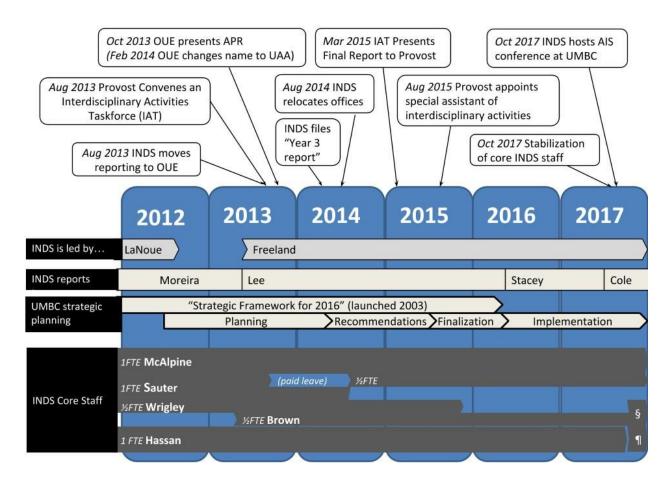


Figure 1.1: Recent history of INDS, highlighting factors that have influenced the program

in summer 2017). In his first months, Dr. Freeland was further informed that the program would be moving its physical location during the following year (2014) from the offices within which it had operated since its inception.

INDS has also experienced two significant changes to the academic context within which it operates at UMBC. First, between 2014 and 2017, UMBC engaged in producing and starting to implement a new strategic plan for the university. The previous plan, "Strategic Framework for 2016," had led directly to the creation of what is now UAA and the creation of its Vice Provost/Dean (Moorjani A., 2000). It remains unclear at this time what is being carried forward from the previous effort into the new plan, particularly as regards previous expectations on professional staff.

Second, shortly after Director Freeland's arrival, the Provost launched an Interdisciplinary Taskforce under the leadership of Dr. Carole McCann to "gather information about ongoing activities, identify opportunities and barriers posed by existing policies, practices, and campus culture, assess national models of best practices in support of interdisciplinary teaching and research, and recommend changes to maximize our institutional strengths at UMBC." Approximately 18 months later, Dr. McCann submitted a final report to the Provost (McCann, 2015) which mentioned the INDS program exactly twice, emphasizing problems of

conflating INDS with other interdisciplinary programs at UMBC. In the report, Dr. McCann states "Yet, this wealth and diversity of interdisciplinary activities is not visible in the UMBC narrative. Instead, in many instances the word interdisciplinary is understood only to refer to the Interdisciplinary Studies Program, the individualized undergraduate major option." and goes on to recommend (Page 9, recommendation #10, Academic Advising): "At the moment, advisors, and thus incoming students, are only introduced to the Interdisciplinary Studies Program (INDS), rather than the full complement of interdisciplinary programs." Dr. McCann further invited Freeland to a meeting at which she presented a list of perceived weaknesses with the INDS program (Appendix C). A few months later, the Provost appointed Dr. McCann as Special Assistant to the Provost for Interdisciplinary Activities and announced the formation of a Faculty Advisory Committee on Interdisciplinary Activities to "provide advice and guidance to Special Assistant Dr. McCann and me as we implement the recommendations of the Interdisciplinary Activities Task Force." These actions combined to render moot much of the 2011 APR self-study and outcomes, particularly evaluation and future directions.

A final layer of change within the past six years of INDS has occurred within the personal lives of all program staff - most notably the untimely passing in 2016 of one member of core staff.

In 2017, INDS passed three significant milestones: (1) successful completion of a commitment initiated three years prior to host at UMBC the 39th annual conference of the international Association of Interdisciplinary Studies; (2) successful conclusion to years of efforts to stabilize a core staff position for a long-term adjunct (Eric Brown) as a full-time program coordinator in order to offset the loss of staff; (3) successful completion of a national search to replace the Vice Provost/Dean of the Division to which INDS reports. These events prompted the program to submit a formal request to change both the name of the unit and the name of the degree it confers to *Individualized Study*. The rationale centers upon a simple observation: as a result of growth in the number of interdisciplinary majors offered by UMBC, it is no longer helpful for a single academic program at UMBC to retain the name "*Interdisciplinary Studies*" [full text found in <u>Appendix E</u>]. The proposed name change clarifies the original purpose for which this program was created and the title "*Individualized Study*" was chosen over "*Individualized Studies*" to emphasize a continuing, guiding principle of assembling each student's undergraduate career into a single, coherent program of study.

In Summary, this APR arrives in the middle of deep, and ongoing, program evolution. The challenge, as for any academic department, has been that of "building a ship at sea" in that INDS must continue uninterrupted operation, while each element is critically examined and changed. Program staff, together with colleagues in UAA and from the broader university community have endeavored, with steady commitment and no small degree of ingenuity, to convert challenges into energy for positive change. Evidence for this claim comes from the academic success of INDS graduates. For example, sixteen of the seventeen students who graduated in 2017 are, to the best of our knowledge, in the process of achieving the goals for which their degrees were designed (Appendix B). The lone outlier planned to enter a Master's program in Criminal Justice. She was accepted and awarded a scholarship in the desired program, but was still unable to cover her costs of living. Instead she is now employed by UMBC as a grants and contracts specialist. Four students in this cohort applied to medical school and all were accepted by one or more programs: an achievement unmatched by any other academic department at UMBC.

These numbers are small, but they speak clearly to the success of INDS. That said, important questions remain, and throughout this self-study we welcome expert reviewers into our thought-processes about current challenges.

#### **1B Mission of the INDS program**

INDS works with faculty and professional staff from across the UMBC campus to guide students through design and implementation of an individualized undergraduate education. Each degree combines elements from two or more existing academic programs, and concludes with the planning and execution of a capstone research project. Our writing-intensive core curriculum works in harmony with uniquely-tailored advising to integrate coursework, co-curricular and extracurricular activities into a single coherent whole.

#### **1C Organization of the INDS Program**

INDS reports to the Vice Provost/Dean of Undergraduate Academic Affairs, Dr. Katherine Cole, as one of the nine units which together comprise the Division of Undergraduate Academic Affairs (UAA: <u>https://uaa.umbc.edu/</u>).

Organization within the program revolves around the creation of individualized, integrative undergraduate degrees. This focus means that INDS staff work closely with faculty and staff across the university. Two, key structures formalize these relationships: the Interdisciplinary Studies Committee (ISC) and an evolving suite of faculty mentors that work with any given student on their individualized degree. Once the degree plan is completed by a student to the satisfaction of both INDS staff and faculty mentors, it is submitted to the ISC for final review. A student may only proceed towards graduate from this program if their degree plan receives a formal vote of approval from the ISC. Details of the process by which degrees are formed and evaluated are provided in the ensuing sections about assessment, curriculum and faculty profile. All of these guidelines are described in detail in the description of INDS policies which is available as a <u>PDF document</u> through the program website.

#### **1D Specializations of the INDS Program**

INDS offers options for both a Bachelor of Arts and Bachelor of Science degree in order to welcome students with diverse academic interests, and the staff, even considering its small size, has the necessary background training to meet their wide-ranging academic needs. (Section 4 - Faculty Profile). A detailed characterization of our students is provided in Section 8 (Student Profile). The primary specialization of INDS lies in scholarship concerning the integration of insights and methods from different academic disciplines into a single coherent degree, and all of our students will draw coursework from more than one department (and often more than one college) in the university. The program is currently part-way through a paradigm shift in terms of how it interprets this specialization; although the scholarship of interdisciplinarity in AIS literature remains an important component of the INDS core curriculum, more attention is now focused on broader challenges of creating an individualized degree at a public university. Relatively new associations such as the Individualized Majors Program (IMP) network have been valuable resources for understanding program challenges, strengths, and best practices. This topic is discussed in greater detail in Section 16: Future Directions.

#### **1E Relationship to the mission of UMBC**

In February 2014, INDS was redirected to report to UMBC's Division of Undergraduate Academic Affairs (UAA). This guides our relevance to the mission of UMBC and retains the program's position outside of the major colleges and schools in which other undergraduate degree-granting programs are housed (College of Natural and Mathematical Sciences, College of Engineering and Information Technology, College of Arts Humanities and Social Sciences, School of Social Work, Erickson School).

The currently stated mission of UAA is to "lead and connect to the UMBC community by coordinating university-wide initiatives designed to support students toward successful completion of their academic journey at UMBC and to ensure they are prepared to meet the challenges of the future. UAA is involved in developing and revising curricula, programs, and academic policy and in fostering external relations to deliver a distinctive experience for all undergraduates." The accompanying vision is that "The Division of Undergraduate Academic Affairs enriches the undergraduate student experience academically, socially, and civically. Working independently and collaboratively, our units offer programs that contribute to student success and support the broader mission of the University."

Since arriving within UAA, INDS has worked steadily to better align with the division by seeking to model and integrate best practices from the other, sister units. So far these activities have included academic policy, design of honors curricula (Honors sections for classes) and development of undergraduate research. Of particular, current interest is a growing collaboration with the Office of Undergraduate Education (OUE), which specializes in providing "*programs to serve students in their initial year at UMBC*." This complements our program which accepts many second year students. Several INDS staff have taught First Year Seminars for OUE and Dr. Freeland provides a yearly pair of guest lectures to OUE's "Discovery scholars." More substantially, INDS has worked with OUE to integrate the Living Learning Communities of these two units. Integration with other units of UAA including the Sherman STEM Teachers Scholar program and the Womens' Center is more exploratory, and dependent upon specific degree programs designed by individual students. UAA units with which we have the least tangible connections at present are the Meyerhoff Scholars program and the Learning Resources Center. In both cases, excellent relationships exist between directors and staff members, and we welcome ideas from the reviewers on ways to strengthen any of these connections.

More generally we perceive that working "between the colleges" is one way in which INDS can contribute to UAA's mission to "coordinate university-wide initiatives." This work matches areas of student interest that integrate arts, humanities and/or social sciences with STEM disciplines and leads into a direct discussion of our relationship to the University Mission, which states that UMBC "is a dynamic public research university integrating teaching, research, and service to benefit the citizens of Maryland. As an Honors University, the campus offers academically talented students a strong undergraduate liberal arts foundation that prepares them for graduate and professional study, entry into the workforce, and community service and leadership... UMBC contributes to the economic development of the state and the region through *entrepreneurial initiatives*, workforce training, *K-16 partnerships, and technology* commercialization in collaboration with public agencies and the corporate community. UMBC is dedicated to cultural and ethnic diversity, social responsibility, and lifelong learning." This mission reflects the university vision that "Our UMBC community redefines excellence in higher education through an inclusive culture that connects innovative teaching and learning, research across disciplines, and civic engagement. We will advance knowledge, economic prosperity, and social justice by welcoming and inspiring inquisitive minds from all backgrounds."

In the broadest sense, foundational principles of INDS serve the vision of "*teaching and learning across disciplines*" and the intent to "*offer academically talented students a strong undergraduate liberal arts foundation that prepares them for graduate and professional study, entry into the workforce, and community service and leadership.*" INDS has been successful in winning grants and awards for creating project-based courses (see Section 5) in which students learn project management skills and create new entrepreneurial initiatives. These include The Garden and the Kinetic Sculpture Project, as described in Section 3 Curriculum.

In more practical terms, INDS contributes to UMBC by serving students whose interests and professional goals reach beyond the boundaries of a traditional major. Although new degree programs come into existence regularly, the speed at which the world is changing converges with the diversity of our students to ensure a future in which INDS continually explores combinations of coursework from two or more existing programs that can lead students through timely graduation into a post-graduate future of their choosing. Throughout INDS history, some faculty and senior administrators have chosen to use INDS to explore ideas for the development of new academic programs. The most recent example at UMBC was development of the Global Studies program. This is a role that INDS welcomes wherever faculty and one or more students perceive mutual gain and can articulate the academic value to the ISC through appropriate degree plans. From analogous academic units at other institutions, we learn that this can be a powerful use of programs like INDS wherever campus leadership chooses to notice and use the possibility.

UMBC's total undergraduate enrollment has increased almost 20% over the past 10 years, but only 2.5% within the past 6 years: much of this more recent growth occurring within the college of Engineering and Information Technology (Figure 1.2). Meanwhile, UMBC's retention statistics remain at a midpoint within the University System of Maryland: lower than College Park, Salisbury and Towson (source: <u>https://www.usmd.edu/IRIS/</u>). This suggests to us that the future of INDS lies less with attracting new students to UMBC, and more with helping UMBC process the growth it has undergone. Enrollment has not increased evenly across different colleges and degree programs. The largest four departments at UMBC (*Biological Sciences, Information Systems, Computer Science and Electrical Engineering* and *Psychology*) account for degree programs that serve over 46% of our undergraduate population. Biological science programs have approximately doubled enrollment over the past decade.

Anecdotally, we know of many INDS students who report some variation of "I would have left UMBC if it were not for this program." It is difficult, however, to accurately capture these data, let alone to estimate the number of students who do leave UMBC because they did not find an INDS alternative in time

	UMBC Enrollment				College of Arts, College of Natural Humanities and and Mathematical Social Sciences Sciences		College of Engineering and Information Technology		Erickson School for the Management of Ageing Services		School of Social Work	
	Undergad	Total	students)	Undergad	Total	Undergad	Total	Undergad	Total	Undergad	Total	Undergad
2007	9,464	12,041		3,727	5,037	1,726	2,065	2,167	3,030	40	69	271
2008	9,612	12,268		3,750	5,098	1,813	2,169	2,296	3,178	47	100	253
2009	9,947	12,543		3,984	5,285	1,905	2,280	2,389	3,276	46	71	300
2010	10,210	12,888	39.0%	4,264	5,547	2,026	2,403	2,536	3,517	40	70	331
2011	10,573	13,199	41.7%	4,495	5,759	2,214	2,553	2,578	3,572	41	60	372
2012	10,953	13,637	43.3%	4,450	5,660	2,427	2,761	2,873	3,993	48	58	357
2013	11,136	13,908	43.1%	4,347	5,576	2,613	2,946	3,051	4,240	44	57	360
2014	11,379	13,979	42.6%	4,261	5,359	2,660	2,969	3,342	4,518	29	41	399
2015	11,243	13,839	42.0%	4,036	5,100	2,661	2,932	3,461	4,698	23	44	385
2016	11,142	13,640	41.9%	3,906	4,921	2,583	2,834	3,487	4,699	22	40	377
2017	11,234	13,662	40.5%	, 3,884	4,894	,2,576	2,827	/ 3,674	4,815	22	44	382
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2012-17	2.6%	0.2%		-12.7%		6.1%	2.4%	27.9%		-54.2% -2		7.0%
2007-17	18.7%	13.5%		4.2%	-2.8%	( 49.2%	36.9%	69.5%	58.9%	-45.0% -3	6.2%	41.0%
				/		/	E	nrollment of	Largest depa	rtment in eacl	h college	
									s./Bus. Tech. A Eng (inc pre-C		e-Comp Sc	i (inc. pre-Comp
							1,	670 = Biolog	y + Biochemist	ry + Bioinforma	atics + Biolo	gy Education
							- 89	94 = Psycholo	ogy			
							=	5 196 studen	ts total (46.2%	of total under	nraduate en	rollment)

**Figure 1.2 Enrollment statistics for UMBC, 2007-2017**. Source: IRADS data (Primary Plans, Begin Term Census, Undergraduate Career, All FT & PT, all campuses) *personal communication from Vice Provost for Enrollment Management, Yvette Mozie-Ross.* Transfer enrollment data from Rex data (Student Term Table) provided as personal communication from Connie Pierson, Associate Vice Provost for Institutional Research, Analysis & Decision Support

The individualized major option cannot, of course, serve all students whose interests lie beyond the sixty majors offered by UMBC. Program staff routinely meet with students who have identified a potential degree that is not available at UMBC, but is manifestly so elsewhere. Aviation technology, kinesiology and architecture are examples from recent conversations. It is usually better for these students to transfer to an institution that can meet their academic needs. These cases represent, however, just one end of the spectrum of student interests. At the other end are those students happily enrolled in one of UMBC's degree-granting programs. INDS operates between these two extremes, where an open question remains for students who find INDS midway through their undergraduate careers: How should INDS balance students' evolving desires for a degree against the reasons for them to seek the "quickest path to graduation"? This question forms a major theme in the remaining sections of this self-study, and is revisited in more detail in *Section 16: Future Directions*.

# 2. EDUCATIONAL GOALS, LEARNING OUTCOMES, AND PROGRAM ASSESSMENT PLAN

#### 2A Summary of the assessment of student learning outcomes the program

INDS's fundamental educational goal remains unchanged since the last APR: to "Afford highly motivated, intellectually mature students the opportunity to construct their own academic programs, with the hope that these students might better profit from the experience than from the traditional major programs" (Rosenthal, 1972). However, educational goals within the processes through which the program seeks to achieve this goal have developed considerably, not least by refining intended learning outcomes. Educational goals for individual components of the INDS program are listed in Figure 2.1, which shows the improvements that have occurred. The changes have been continuous, but have shifted in emphasis. Early refinements tended to sharpen and/or optimize a single component of the program (an individual course or the degree planning/ proposal system). More recent changes have emphasized alignment and integration between these components. The evolution of educational goals and learning outcomes has led to corresponding changes in assessment, mirroring the same two phases: (1) development of assessment metrics within components of the program; (2) alignment between the different components to create a foundation for better program level assessment.

	as we began this APR period	as we end this APR period
Degree Plan Proposal	A viable, interdisciplinary degree focused upon delivery of a capstone research project	A viable, individualized degree that balances preparation for next steps after graduation, training for a capstone research project and growth in Affective Functional Competencies
INDS330	Introducing students to the scholarship of interdisciplinarity (especially integration strategies) within a Writing Intensive framework	A foundation of skills in written and oral communication, critical analysis and reasoning, technological competency and information literacy, and application of these skills to the challenge of individualizing their education.
INDS335	Degree plan development is a co-curricular activity in partnership with primary INDS advisor and faculty mentors	Degree plan development is the primary deliverable of a course involving all INDS core staff and faculty mentors (in part so as to facilitate creation of learning outcomes and assessment)
INDS399	(Post-degree plan approval) development of a capstone idea as a co-curricular activity with no direct expectations or uniform expectations for supervision prior to INDS480	(Post-degree plan approval) development of a capstone idea as the primary deliverable of a course involving all INDS staff and faculty mentors, along with a UMBC reference librarian
INDS400	unchanged but reduced enrollments in this course in n	art due to developments shown above and in part because INDS
INDS410	advisors are encouraging this course less heavily pendi	
INDS480	Guiding students from highly variable start positions towards development of a detailed capstone research plan	Guiding students who have successfully completed INDS399 through the first half of capstone research, namely preparing all necessary steps to conclude INDS490 by producing specific deliverables through explicit methodology applied to a specific research question in the context of others' scholarly activity according to a detailed timeline and with an overt, stated relationship to UMBC's Institutional Review Board
INDS490	Supporting students and their faculty mentors in the production of a senior capstone project	Providing and supporting an explicit and detailed structure (including workshops, checks and explicit grading rubrics) that leads students to complete successfully a long-term research project

Figure 2.1: Development of educational goals for major components for the INDS program

The first phase in assessment characterized activity from the start of APR cycle up through the mid-point represented by INDS Year 3 review (end of calendar year 2013). Results included doubling the academic credit (and therefore instructional support) for INDS480 (Spring 2013), subsequent addition of two new courses, INDS335 (Fall 2014) and INDS399 (also Fall 2014) which connected intended learning outcomes of INDS330 with those of INDS480 (see Section 3: Curriculum). The same data guided an overhaul of the content and processes through which students develop their plans for an individualized major (Fall 2013), and the introduction of a rubric which the Interdisciplinary Studies Committee uses to evaluate these plans (Spring 2014). All changes followed the assessment cycle, per the guidance of UMBC Faculty Development Center. In particular, assessment of students at all stages of the degree completion process, especially capstone research projects (both written deliverables and oral presentation), guided changes to the core courses. Outcomes of these changes were then assessed to enter a new round of adjustments. Assessment was largely indirect, but included significant elements of qualitative data with an emphasis on Narrative Aggregation - i.e. accounts provided by students and staff of their experiences within the program, synthesized into significant insights. Similar but less systematic examination and revision of learning outcomes influenced other components of the curriculum as summarized in Figure 2.1. An important goal for all changes has been to improve the clarity with which the program communicates expectations and rubrics to students and faculty mentors.

		Courses offered by INDS							
In	terdisciplinary Studies (INDS) Curriculum	FYS	330 of Knowl re	335 Degre # Writin # Servin #	399 Guide Readin B	400 1/2 Reiser 6	430 Semin W	480 Capata Projec Semin N	490 Capato ne Projec t-2 col Type I and II
	Map (September 1, 2016)								
N	DS Student Learning Outcomes								
1	Enhance and develop self-awareness and critical agency	1	1-2	2	3	2-4	2-3	3	4
2	Understand connections to community	1	2	2	3	1-4	2-3	3	4
3	Written communication skills (Functional Competency 1)	2	2-3	2	2	3-4	2-4	3	4
4	Oral Communication Skills (Functional Competency 1)	2	1-2	1	1		2-3	3	4
5	Critical Thinking Skills (Functional Competencies 3 and 5)	2	2-3	2	3	2-4	2-4	3-4	4

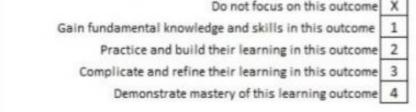


Figure 2.2: The first curriculum map developed for the INDS program

The second phase of evolution in the INDS assessment plan occurred after the Year 3 review, i.e. Jan 2014 until now and has received significant guidance from Jennifer Harrison of UMBC's faculty development office. Here emphasis has shifted from assessment within courses to their alignment and integration so as to lay a solid foundation for fine-grained, program-level assessment beyond anything previously accessible. A pivotal moment in this latter phase was the summer 2016 drafting of a detailed curriculum map as shown in Figure 2.2. Program-level assessment prior to this point (2014-2016) focused on identifying core concepts that run through the INDS curriculum and align with UMBC's declared Functional Competencies (even though the latter are primarily used for general education courses). These skills, which represent program-level intended learning outcomes, were identified as written communication, oral communication and critical thinking. Thus, for example, the format and wording of rubrics for grading presentations (including the critical thinking they represent) now align across INDS330, INDS480 and INDS490. Similar alignments are underway for writing skills and the scholarship of interdisciplinarity. The earlier phase of assessment identified, however, characteristics beyond this cognitive learning that are significant to students' success within, and beyond, their undergraduate career. As a result of this recognition Director Freeland entered into a collaboration with UMBC's Honors College and Shriver Center to investigate Affective Learning (the "forgotten domain" of Bloom's learning taxonomy). Further details of this ongoing research are provided in Section 5: Faculty Research and Scholarly Activity. As a result, important, affective learning elements were initially identified as "self awareness and critical agency" and "an understanding of one's standing as part of a community" (Figure 2.2, within the dashed line). Further assessment coupled with the alignment of other program components has created a context for expanding and integrating these elements of affective learning. The resulting, umbrella context of "professionalism" connects INDS with an initiative underway at the University System of Maryland: see Figure 2.3. For example, traditional course objectives/rubrics for "attendance and participation" have been redefined in terms of "Acting with the interest of the larger community in mind," "Taking responsibility for one's actions," "Following through on commitments," "Examining the implications of one's own behavior and decisions" and "Evaluating one's own performance over time and adjusting." This simple act of redefinition allows the INDS program to begin connecting attendance and participation in INDS330 with more sophisticated expectations for students' time management and regular, professional communications with faculty mentors by the time that they reach INDS490 capstone research project.

To be clear, INDS does not yet claim to possess rigorous rubrics with which to assess these concepts not least because early exploration of metrics revealed interesting complexities. For example, early data collection within and beyond INDS has shown that student self-assessment of affective learning typically declines as a result of learning opportunities that intend to teach these skills. Ensuing mixed-methods investigation has revealed that this represents something similar to the "Dunning Kruger effect" (Kruger et al. 1999) whereby students' initial affective learning reveals to them that they were not as skilled as they initially thought. This area of activity is worth highlighting as a major area of growing interest for the INDS program (See Section 5: Faculty Research and Scholarly Activity)

EXISTING CONTRACTOR OF THE CON
D5 Acting with the interest of the larger community in mind Civic agency: Regards self as connected to communities and social groups, and as able to proactively interact with them. Seeks ways to make positive change.
D2 Taking responsibility for one's actions D6 Following through on D6 Following through on
Commitments AFC7: SELF AWARENESS Personal accountability: Internalizes obligations to fulfill project goals, and holds self responsible to
and learning from them D1 Examining the implications of one's own behavior and decisions Knows and manages own triggers. Understands how others perceive self. Interprets the behavior of others accurately. Knowledge of strengths and weaknesses: Knows strengths and weaknesses and positions self in
<b>Self-efficacy:</b> Self-directs, relies confidently on own abilities and resources, but requests help where necessary; constantly seeks to improve and expand abilities.
D3 Evaluating one's own performance over time and adjusting
D4 Persevering in the face of challenges and changes Honest Self-assessment: Recognizes own strengths and limitations and seriously considers both positive and negative feedback. Seeks assistance willingly when necessary. Persistence: Confronts difficulties resolutely, and perseveres in trying to manage them. Reframes failures and mistakes as learning opportunities, and doesn't allow them to become disabling or discouraging. Follows through on commitments.

**Figure 2.3:** Connections between affective learning at UMBC a USM definition of professionalism

### 2B Direct assessment of Student Learning Outcomes

Given the extent of changes described above and in Section 1, the most meaningful direct assessment we can provide is the overview in Figure 2.4, which places data shown in *Section 8: Student Profile* into important context. The key conclusion is that the number of students graduating successfully is almost identical at the start and end of this APR cycle (although it decreased temporarily in between). This is noteworthy because, over the same period, the number of degree proposals approved by the ISC has declined by 35% and the number of majors enrolled in the program has declined by 25%. Fewer students, and fewer proposals approved with the same number of graduating seniors indicates either that students who receive approval are graduating at a significantly higher rate, or that they are graduating faster (or both).

Is the program becoming more efficient and effective, or less rigorous? Over this period, the number of INDS majors enrolled in INDS classes has increased 38% as the core curriculum has expanded and become more structured. We are teaching more classes to fewer INDS students who are graduating at a higher rate than at the start of the APR period. It remains possible that standards have declined in all INDS classes and the ISC, but this seems unlikely as the average GPA of INDS students has generally remained constant.

Academic year	Number of Declared Majors*	Total number of students enrolled in all classes <sup>§</sup>	Number of Degree Plans Approved	Number of Graduates <sup>¶</sup>	Average GPA of students enrolled in INDS
AY11-12	140.5	116	31	25	3.31
AY12-13	144.5	128	22	23	3.39
AY13-14	119.5	124	12	23	3.35
AY14-15	132.5	199	21	18	3.49
AY15-16	120	178	24	17	3.36
AY16-17	106	150	20	24	3.36

\* average of number reported at Fall and Spring midpoint

<sup>§</sup> excepting internship (INDS410) and independent study (INDS400)

<sup>®</sup> Calculated as total of Fall, Spring and ensuing Summer

Figure 2.4: Direct Assessment Overview for the INDS program over the period of this APR.

Unlike most other majors, the majority of academic credits earned by INDS students come from coursework distributed throughout the degree programs, departments and colleges of UMBC. In other words, INDS GPA reflects campus-wide standards. Further evidence for rigor of the program are presented in *Section 10: Student Research* and *Section 13: Profile of Graduates*.

Constant GPA over the past six years further indicates that the program has not merely shrunk to become an elite program, serving only the most academically talented students who could thrive anywhere. INDS is serving the same sort of student with greater efficiency. This is noteworthy given the success with which INDS students are achieving their post-graduation goals, from medical school and other graduate training to employment (<u>Appendix B</u>).

The interpretation that the program has in fact gained structure and rigor along with efficiency is strengthened by qualitative data in the form of comments made by students at exit interviews. In 2014, a representative sample of answers to the exit-interview question "What changes would you suggest to the program?" included the following:

"More instruction and guidance"

"Better communication ... about creating a successful capstone project"

"2 semesters of INDS 480"

"INDS 490 DEFINITELY NEEDS more structure."

Since then, the program has introduced INDS399 to expand capstone preparation into a year-long process. It has revised INDS480 and introduced workshops and other structure into INDS490 (Figure 2.1). As a result, exit interview comments made in the most recent academic year AY2016-2017 include:

"INDS 480 was very successful in the way it was set up ... All the preliminary research that took place prior to that final semester allowed me to not be on overwhelmed." "480 was instrumental in setting up my capstone."

"[INDS classes] were all extremely helpful in their own ways."

(note that these students had not experienced either INDS335 or INDS99 as a required course.)

**3.** CURRICULUM: Discuss degree requirements, program structure, current courses, frequency of course offerings, and how the curriculum reflects the current state of knowledge in the discipline/field, and substantive changes to the program since the last review. Include in appendices list of courses not offered in the past five years.

#### **3A Degree Requirements and structure of the INDS program**

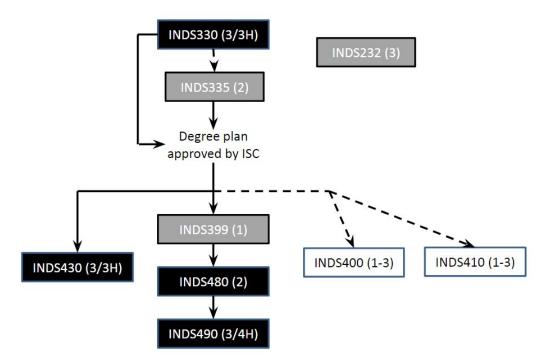
In order to complete the INDS degree, students must assemble a minimum of 42 credits of courses at the 200 level or above drawn from two or more academic disciplines around a core curriculum of INDS classes. The core curriculum comprises six INDS classes (minimum 14 credits, 15 credits if INDS490 is taken as the Honors section) which must be completed with grade "C" or higher. As shown in Figure 3.1, four of these courses form a strict sequence: successful completion of INDS330 and INDS335 are required to enroll in INDS399 which is required to enroll in INDS480, which is required to enroll in INDS490. Students are strongly encouraged to take INDS330 as preparation for INDS335 wherever possible, creating a sequence of five courses. INDS430 may be taken concurrent or any time later than INDS399. Students are also encouraged, wherever possible, to take INDS400 (independent study) and/or INDS410 (internship). Course titles and descriptions are provided in the next section, *3B Current Course Offerings*.

The remaining credits of an INDS degree adhere to four restrictions that reflect the unique role INDS plays within a campus of well-defined majors, minors, and certificates. These are: (1) No INDS degree may duplicate a major offered by another UMBC degree-granting unit. (2) No INDS degree may comprise more than 21 credits from any one discipline, as defined by course prefix. (3) The INDS degree may contain no more than 3 courses that are also counted as degree requirements towards another major. (4) The INDS degree may contain no more than 4 courses transferred from another institution. These restrictions are enforced as part of a non-curricular requirement that is unique to the program, namely adherence to a specific degree plan that has been approved by the ISC.

Students must have received ISC approval for their individualized degree plan to progress beyond INDS 335. If the committee votes to reject a degree plan, a student may resubmit no more than two revised versions. (i.e., a maximum total of 3 submissions). The composition and operation of the ISC is discussed in greater depth in *Section 4: Faculty Profile*.

To submit a degree proposal, a student must have earned a minimum 2.5 GPA overall. A student seeking a B.S. degree must earn at least 30 credits of coursework, grade "C" or above, in STEM, and at least one of their faculty mentors must represent a STEM discipline (designated for this purpose as those in which UMBC offers a B.S. degree). To earn an INDS Honors degree a student must have attained a cumulative GPA of 3.5 or higher in coursework taken at UMBC at the time of applying for graduation and have taken Honors sections of either INDS 330 or INDS 430, and the Honors section of INDS 490. (INDS Honors Curriculum: Appendix D).

A degree plan may undergo revision after it has been approved by the ISC, subject to appropriate petition by the student and with the support from the faculty mentors. Minor changes, such as individual course substitutions, may be approved by the INDS Director while intermediate changes (those that maintain the integrity of the degree plan) require a review by both the entire INDS staff and Director. Major changes must be resubmitted to the ISC for a second approval.



**Figure 3.1: Map of the INDS curriculum**. Courses shown in gray boxes have been created since the time of the last APR, and they have changed from being recommended to being required. Courses shown in white boxes are encouraged but not required for the INDS degree. Parenthetic numbers following each course title indicate the number of credits for that course (H indicates presence of an Honors Section). Solid black arrows indicate a formal pre-requisite, and dashed arrows a recommended pre-requisite. The INDS degree requires a minimum sequence of four courses (4 semesters): INDS330+INDS335 →INDS399 →INDS480 →INDS490. A fifth semester is strongly recommended by taking INDS330 as preparation for INDS335.

#### **3B** Current Courses Offered by the INDS program

INDS currently offers the following courses. Parentheses after the title indicate the number of academic credits involved, and a letter grade is standard unless P/F is indicated.

**INDS 232(H): Interdisciplinary Introduction to Food System Studies (3CR).** This course explores fundamental concepts within food system studies, focusing on the intersection of agriculture, the food industry, human health, environmental sustainability and social justice. Core topics include how our food system supports or diminishes ecological well-being, biological diversity, human health, equity and social justice, and animal welfare. The course also presents and analyzes who are the key stakeholders in the food system and primary opportunities and challenges to reform. Recommended course preparation is *ENGL100 - Composition*. **(H)** Indicates optional Honors section which duplicates *INDS232* but with an added component of applied learning focused local community service, and associated reading, writing and presentation. This course was created to reflect specific student demand and instructional expertise after the Undergraduate Council had rejected a request to introduce a more general, introductory course "INDS230" capable of adapting to different specific topics over time. This class has not been offered since 2016 for reasons discussed in Section 3E below.

**INDS 330(H) - Ways of Knowing (3CR).** How can the insights from various disciplines inform our understanding of difficult issues? This course explores methods of different academic disciplines and their implications for an interdisciplinary understanding of complex problems. Each year students will examine a compelling issue (e.g. AIDS, energy policy) by integrating the contributions of several disciplines. Students will develop skills in interdisciplinary research and problem-solving, oral and written communication, and in integrating diverse perspectives. This course requires *ENGL 100 - Composition* or equivalent completed with grade of C or better. Recommended course preparation is *ENGL 226 - Grammar and Usage of Standard English*. The course is designated *Writing Intensive* (https://oue.umbc.edu/ai/writing-intensive-program/) and department consent is required for enrollment. (H) Indicates optional Honors section with additional reading, writing and presentation. (Recently this has taken the form of research and development of a role playing game based on the documentary film "Cafeteria Man" by INDS 1982 alumnus Richard Chisolm.)

**INDS 335 - Interdisciplinary Degree Plan Writing Seminar (2CR).** This seminar guides students through the process of writing an interdisciplinary degree plan including: a cogent degree description; coursework grouped into measurable learning objectives based on Bloom's Revised Taxonomy of Educational Objectives; ideas for capstone research projects; and a professional cover letter. Students will focus on the processes of close editing, re-writing, and collaboration as important techniques for developing not only an interdisciplinary degree plan but also project and grant proposals of many types. Recommended course preparation is *ENGL 100 - Composition*. To enroll in this course, students must complete *INDS 330* with a grade of C or higher or take these two courses concurrently.

**INDS 399 - Guided Reading in Interdisciplinary Studies (1CR, P/F).** Directed studies carried out under the supervision of faculty mentors previously identified within a student's INDS degree proposal, under administrative oversight of the student's primary INDS program advisor. The purpose of this course is to obtain a thorough grounding in key literature pertaining to the area of undergraduate research identified within the student's degree proposal as a target of the capstone research experience (INDS490). Recommended Course Preparation: A passed INDS degree proposal. INDS399 is repeatable for a total of up to 4 credits. To enroll in this course, students must complete *INDS335* with a grade of C or better.

**INDS 400(H) - Interdisciplinary Studies: Independent Study (1-3CR).** Independent study or research with a faculty mentor focused on an issue related to the student's intended capstone research project. Variable credit course repeatable for a maximum of 12 credits. Department consent is required for enrollment, and this course is available only to INDS majors. All independent studies must include a faculty mentor who signs a formal proposal (available from the INDS web-site under "Forms"), including learning objectives and rubrics. This proposal is also signed and approved by the student's INDS advisor. Proposals are discussed by INDS staff and enrollment is subject to notice of approval. Most independent studies result in research-based papers; the typical length is 30 pages for a 3-credit independent study. If the independent study has the outcome of a finished product/presentation, a 10-page written component must accompany the final project.

**INDS 410 - Interdisciplinary Studies: Internships (1-6CR).** Internships are encouraged in Interdisciplinary Studies and students may request up to six credits of internship experience. Requests for more than six credits must be approved by the director of the Interdisciplinary Studies Program. Each credit of internship requires 40 hours on-site. Internships are rarely

approved for more than 3 credits in any one semester, and the maximum number of internship credits allowed in an INDS degree proposal is six. Students receive a Pass/Fail grade at the end of the internship. This grade is assigned by the INDS advisor. Students must complete a formal proposal for each internship (available from the INDS web-site under "Forms") which includes a clear job description/responsibilities and learning objectives, signed by those involved in supervising this internship. Students are required to keep a daily journal tying your internship experience to readings and material from academic courses. A mid-point meeting must be scheduled the student's INDS advisor to review journal entries and discuss progress. Students are required to read and review six articles from four different sources (e.g. academic journals), and to write a 5-8 page final paper synthesizing the experience, including an analysis of interdisciplinarity. Permission is granted after proposal is approved. Variable credit course repeatable for a maximum of 6 credits. Department consent is required for enrollment, and this course is available only to INDS majors.

INDS 430(H) - Interdisciplinary Studies Seminar (3-6CR). A "special topics" seminar that applies the integrative strategies taught by INDS to a specific area of interest through readings, discussions and class presentations that cut across academic disciplines. Department consent is required for enrollment, but the course is available to all majors. Because the course changes topics over time, it may be taken more than once for a maximum of 6 credits. (H) indicates optional Honors section with additional reading, writing and presentation. From Fall 2014 through Fall 2017, Steven McAlpine developed a project based learning version of INDS 430 entitled "The Kinetic Sculpture Project" in which students from a variety of majors researched, designed, built, tested, and raced a human powered sculpture called "The Kraken Upcycle." The Kraken won the grand prize and placed first in the 2015 Baltimore Kinetic Sculpture Race. McAlpine wrote and received two grants to fund the project: a Breaking Ground award and a grant from the Alex Brown Center for Entrepreneurship, which listed the course as an elective for the entrepreneurship minor. A second section of INDS 430 led by Jill Wrigley also won an entrepreneurship grant: The Garden was a student led project to build raised beds and grow fresh vegetables on campus. One of the founding members of The Garden, INDS student Andres Camacho, grew and sold microgreens to the campus food provider, Chartwell's. Camacho also won "seed funding" - which he actually used to buy seeds - from the Cangiolosi business competition.

**INDS 480 - Interdisciplinary Studies:Capstone Project Seminar (2CR).** This seminar prepares students for *INDS 490 - Interdisciplinary Studies: Capstone Project*. With consultation from faculty mentors, students work with the course instructor to develop and submit a formal, detailed proposal for a capstone project (available from the INDS web-site under "Forms"). This proposal includes a description of the landscape of pre-existing research for the topic, a statement of methodologies, identification of primary disciplines involved and their specific contributions/ specific strategies for their integration, a description of deliverables, explicit statement of relationship to the Institutional Review Board and a detailed timeline. Department consent is required for enrollment, and this course is available only to INDS majors who have completed INDS330 and earned a grade of C or higher.

**INDS 490(H)** - **Interdisciplinary Studies: Capstone Project (3CR/H4CR).** An independent study or other creative effort demonstrating the accomplishment of the learning objectives approved in the student's interdisciplinary studies proposal. Department consent is required for enrollment, and will be given after the student submits a written statement

describing the capstone project which has been approved and signed by the faculty advisors (see INDS480 above). This course is available only to INDS majors who have completed INDS480 and earned a grade of C or higher. **(H)** Indicates optional Honors section which requires a separate and additional proposal describing what justifies one extra academic credit approximating 40 hours of work additional to the project described in a standard capstone project. The proposal describes this extra work and how it elevates the significance of the project above the requirements of a traditional capstone, with an emphasis of connecting the research to the world beyond INDS. We welcome in particular presentations (including poster presentations) at UMBC's undergraduate research and creative achievement day (URCAD) or another conference or meeting within/beyond UMBC.

## **3C Frequency of course offerings**

A history of the frequency of INDS course offerings is shown in Table 1 and Table 1<u>A</u>. Moving forwards, INDS currently expects to offer the courses shown in Table 3B: two sections of INDS330 each semester (Fall and Spring), two sections of INDS480 in the Fall and a single one in the Spring (the majority of students graduate in May and need INDS480 as preparation for the Spring INDS 490 capstone course), and a single section of the others, except INDS400, 410 and 490 which enroll one student per section (and open as many sections as needed).

	Fall Semester	Fall Semester	Summer sessions
INDS232(H)	(not offered)	(not offered)	(not offered)
INDS330(H)	Two sections, each with an Honors option	Two sections, each with an Honors option	(not offered)
INDS335	One Section	One Section	(not offered)
INDS399	One Section	One Section	One Section
INDS400	As many sections as needed (one student per section)	As many sections as needed (one student per section)	As many sections as needed (one student per section)
INDS410	As many sections as needed (one student per section)	As many sections as needed (one student per section)	As many sections as needed (one student per section)
INDS430(H)	One section with an Honors option	One section with an Honors option	(not offered)
INDS480	One or two sections	One section	(not offered)
INDS490(H)	As many sections as needed (one student per section)	As many sections as needed (one student per section)	As many sections as needed (one student per section)

Figure 3.2: Current course offerings for the program (AY2017-18)

# **3D** How the curriculum reflects the current state of knowledge in the field of interdisciplinary studies

For the majority of the period covered by this APR, the INDS curriculum has based its theoretical frameworks upon the published works by interdisciplinary scholars such as Julie Thompson Klein, William Newell, Allen Repko and Veronica Boix Mansilla. The textbook for INDS 330 has been Allen Repko's <u>Interdisciplinary Research</u>: Process and Theory in its first (2008), second (2012), and third (2017, with co-author Rick Szostak) editions. In addition INDS 330 has also used William Newell's (2006) peer reviewed paper "Interdisciplinary Integration by Undergraduates" and Veronica Boix Mansilla's Harvard Project Zero paper with Matthew Miller "Thinking Across Perspectives and Disciplines" (2004).

In recent semesters, instructional faculty from the core departmental staff have begun to augment these foundational works with an increasingly broad array of contributions from multiple disciplinary sources. This shift is discussed below in *Section 3E* (Substantive changes to the program since the last review) and further in *Sections 15: Evaluation* and *16: Future Directions*.

#### **3E** Substantive changes to the program since the last review

As summarized in Table 2, the INDS program has continued to develop a robust and integrated curriculum that originated in the previous APR cycle.

In 2012, the number of credits for **INDS 480 Capstone Seminar** (originally introduced Spring 2006) increased from 1 to 2 in order to double the amount of class time available and thereby produce stronger capstone research projects.

In 2014, **INDS 335 Degree Design Seminar** was introduced as the result of a research grant for curricular development (see Section 5: Faculty Research and Scholarly Activity). Originally an optional, one credit pass/fail seminar, this course was designed with the intention of creating a more structured environment for degree plan developmental. This course was revised in February 2017: the number of credits earned increased from one to two, it changed from P/F to a regular letter grade, and became a formal pre-requisite to INDS399.

Also in 2014, INDS staff member Ms. Jill Wrigley introduced the program's first 200 level course, **INDS 232 Food Systems**. An attempt the previous year to introduce a less subject-specific 200-level course (INDS230) had been rejected by the Undergraduate Council, which governs the introduction of new courses at UMBC. With Ms. Wrigley's passing in 2016, a static budget has combined with urgent need to relocate resources in order to stabilize core staff such that **INDS 232** has not been offered since.

In 2016, the program introduced **INDS 399 Guided Reading** (1 credit, pass/fail) to bridge a gap between the approval of a student's degree proposal, and their detailed planning of a capstone research project (INDS480). The course challenges students to apply the integrative strategies they learned in INDS 330 to their chosen topic for capstone research. The course was designed by then INDS staff-member Samirah Hassan, using her graduate education in Instructional Systems Design. To meet the unusual needs of INDS students, it operates without a classroom, and instead relies on a series of independent study meetings, integrated through a web-portfolio. In Fall 2017, the course increased from 1 credit to 2 credits to reflect student reports of workload and in reaction to its perceived success in building better capstone research projects.

Also in 2016, INDS490 began to include a series of workshops focused on writing and presentation skills. Since then, these workshops have increased in number and student attendance has become an expectation rather than an encouragement. The early assessment is that the workshops are helping produce higher quality capstone projects.

Beyond these specific changes, the most recent two years has seen a shift regarding **INDS 430 Special Topics** course offerings. This began with a reduction in reliance on adjunct faculty. The final, adjunct-led section of INDS 430 occurred in Spring 2017 and was co-taught by INDS alumnus Dr. Brian Montgomery based on his expertise in "Interdisciplinary Approaches to Satellite and Geospatial Fusion" at the JHU Applied Physics Lab.A second phase has involved a growing emphasis on applied learning (the Kinetic Sculpture project). Finally, INDS has reduced the frequency with which the course is offered, encouraging students for now to take advantage of a long-standing policy that they are allowed to substitute another upper level course that is taught as a seminar, crosses disciplinary boundaries and is relevant to the learning objectives of their degree. Students must petition for this substitution on a case-by-case basis. As part of the petition, they commit to writing a scholarly analysis of the interdisciplinarity found within the course expressed in terms of the integrative concepts taught in INDS330.

The shift described for INDS430 represents part of a deeper, overall strategy that has guided similar changes in other courses (such as INDS330, last taught by an adjunct in 2015, and INDS480 now taught by an adjunct only in the Fall semester). The strategy reflects the meeting point of three, interrelated factors: (1) limited financial resources to pay adjuncts (see section 14 Budget), especially when prioritizing the stabilization of core staff; (2) a growing emphasis on curricular integration, which benefits from direct involvement of core staff in all classes; (3) a growing emphasis on assessment, particularly at the program level, which is enabled when the same staff are teaching multiple classes. Let us be clear for the record that INDS perceives adjuncts inferior in no way other than the level of commitment that can be asked for beyond the confines of the course that they are being paid to teach. These changes are discussed in greater detail in *Section 15: Evaluation* and *16: Future Directions*.

# 4. FACULTY PROFILE: Discuss the data and analyze trends in the number and distribution of faculty (full/part-time, visiting, tenure/non-tenure track, part-time); total number of faculty.

INDS is a unit comprised primarily of professional staff. Faculty involvement is limited to two, indirect fronts: membership of the ISC and mentorship of an individual student.

#### 4A INDS program staff

The INDS program is staffed by 4.5 FTE professional staff, one of whom (the director) is also designated as tenured faculty within the department of Biological Sciences. The remaining 3.5 FTE lines are distributed between one full time assistant director focused on curriculum, a half-time assistant director focused on student advising, a full time program coordinator and a full time administrative assistant. Since these final two positions were filled after the start of the current academic year, a major goal for this year's staff review process ("PMP") is to revisit and evolve professional responsibilities into harmony.

Director Freeland is an interdisciplinary scientist: an evolutionary biologist, cross-trained in computer science and mathematics whose research in recent decades has grown from theoretical biochemistry to encompass the meeting point of natural sciences represented by astrobiology. Assistant Director McAlpine is an arts-integration specialist, and formally trained in the scholarship of interdisciplinarity. Assistant Director Sauter has grown from a background in social sciences to specialize in program administration, after having worked with UMBC's registrar's office where she served the campus from a larger perspective prior to joining INDS. Program Coordinator Eric Brown is an historian of science focused on the mixed human and epistemological factors that lead to changes in (acceptance of) scientific paradigms. Our newest staff member, Administrative Assistant Holly Cudzilo has joined us after extensive professional experience in all aspects of a small, local staffing agency - and therefore brings a wealth of experience about the career readiness of our students.

#### 4B The Interdisciplinary Studies Committee (ISC)

The ISC comprises 12 voting members: Eight faculty, two student representatives who are working on degrees that have already been approved and two professional staff. The eight faculty are distributed across the major colleges of UMBC. Typically, two faculty are drawn from the College of Natural and Mathematical Sciences, and two from the College of Engineering and Information Technology. Between two and four of the remaining appointments are drawn from the College of Arts, Humanities and Social Sciences, depending on whether an appointment draws from the School of Social Work and/or Erickson School. For the period covered by this self-study, the ISC has convened once per month whenever classes were in session (i.e. 4 meetings per semester) to review whatever degree plans had been submitted.

#### **4C Faculty Mentors**

Faculty mentors are required for each, individualized degree. Specifically, each student requires two "degree mentors" (each from a different discipline or professional field) of whom at least one must be full time instructional faculty at UMBC (meaning lecturer or tenure track faculty). This provision exists for degree plans that are best served when one mentor is a practicing professional. For example, Peter Rabins MD, Professor of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine, and Senior Fellow with the

Erickson School, served as a faculty mentor to INDS student and Meyerhoff Scholar Madhu Karamsetty (INDS concentration "Neuroscience and Developmental Aging"). Table 9 lists faculty mentors from Fall 2011 through Spring 2017. Between our previous APR period and this one, a few trends are noticeable. INDS used fewer faculty members from most departments in CAHSS, excepting Education, English, Music and Political Science, where increased faculty participation matches increased student need in those areas. Faculty participation from CNMS and COEIT remained stable. Our largest increase in faculty mentors come from on-campus staff and off-campus professionals.

INDS finds it challenging to secure full time faculty mentors from relevant disciplines, and perceives several reasons for this. Faculty members or department chairs may (understandably) prioritize departmental needs beyond aspirations of INDS students. A few will only talk to students about switching majors into their discipline's degree program(s). Although INDS advisors are very careful not to allow students to duplicate an existing major, they generally adhere to the view expressed more commonly at UMBC that students are welcome to advocate for an individualized, interdisciplinary degree rather than a multidisciplinary combination of traditional majors and minors. We have learned that this tension is shared by many analogous units at other institutions, particularly in areas of the university facing declining enrollment. The program works hard to tread sensitively in such areas at UMBC.

On a different front, INDS perceives a significant problem that students sometimes outgrow their initial perceptions of appropriate mentorship as a result of their studies. The theme of the degree remains unchanged, but the specific focus (i.e. intended capstone research project) can shift as the student progresses through their coursework. INDS advisors can sometimes manage the situation by bringing on a third mentor while an existing mentor steps back from the capstone research project. This is a delicate process and seems inefficient relative to, say, recruiting faculty mentors as plans for a capstone project take shape (rather than at the time of developing a degree plan).

### 4D Adjunct Faculty

Adjunct faculty are not used by INDS as degree mentors for students except for the rare case in which they approach the program, with a student, expressing enthusiasm for the role (in which case they must be complemented by a full-time member of instructional faculty). This in no way reflects a view within INDS that adjunct faculty are of inferior quality, but rather a universal perception among INDS staff that asking adjunct faculty for *pro bono*, additional work is unfair and problematic.

Adjunct faculty are used by the program as instructors for INDS courses. However, as can be seen in Table 1 (list of all courses and their instructors) and as briefly described in *Section 3: Curriculum*, INDS has been steadily reducing its use of adjunct faculty as part of a conscious strategy to increase longitudinal "watch" over our students, and to facilitate smooth evolution of the program as a whole. This strategy is discussed in detail in Sections 15 and 16 (Evaluation and Future Directions).

# 5. FACULTY RESEARCH AND SCHOLARLY ACTIVITY: Describe primary areas of faculty research and scholarship, level of external grants submitted and funded, and notable scholarly achievements.

The previous (2011) Academic Program Review of INDS reported no research activity. Since then the core staff members have been engaged in a wide variety of scholarly activities. Ten significant examples are presented below in reverse chronological order

#### 5A (Fall 2017) Collaboration with KnowInnovation

INDS has entered into the earliest steps of collaboration with KnowInnovation (http://knowinnovation.com/) to explore what they can bring to the individualized degree process. Director Freeland first met KnowInnovation as a result of the NASA/NSF activity reported in section 5D below. A resulting invitation to present at the upcoming AIS conference (section 5B) resulted in their team experiencing UMBC and learning about INDS. This has led to mutual interest in whether their skills, usually used with principal investigators and funding organizations, can be adapted to serve undergraduates involved in degree design and implementation. A mutual aim is to look for fundable research here.

#### 5B (Fall 2017) Annual Conference of the Association of Interdisciplinary Studies

In October 2017, INDS hosted at UMBC the 39th annual conference for the international Association of Interdisciplinary Studies. Themed "Beyond Talking Heads," this conference shifted directions for the conference by focusing sessions on applied and experiential learning. A post-conference survey indicates that two thirds of attendees were very satisfied with their AIS experience, (Figure 5.1: no respondents reported any other categories)



#### 5C (Summer 2016 - present) Collaboration with Brain Trust

An initial meeting between members of the INDS program and Brain Trust (http://braintrustinfo.dk/braintrust-info\_en.html) at the 2016 AIS conference led to a summer collaboration which explored possible uses of their CoNavigator tool within the INDS curriculum (Lindvig, Hillersdal and Earle, 2017, p. 6). INDS has since been using this three dimensional concept-mapping tool with considerable success in the introductory class INDS330 to help UMBC students explore their understanding of complex, interdisciplinary topics.



Figure 5.2: CoNavigator used within INDS330, Fall 2017. Here, students are using this tool to map answers to the question "Why continue with higher education in 2018 USA?

#### 5D (Fall 2016 - present) NSF/NASA Ideas Lab on the Origins of Life

In 2016, Director Freeland secured a grant of \$98,467 from the National Science Foundation (NSF award 1655137) entitled "Ideas Lab workshop on the origin of life." This award was to hold a first-of-its-kind collaboration between three directorates within the Division of Biological Sciences at NSF, NASA Exobiology, a specialized business (Know Innovation Incorporated) and a team of NSF panelists who doubled as workshop moderators. This collaborative infrastructure brought together 30 of the world's leading scientists for one week of intense activities. Scientists formed interdisciplinary teams that considered fundamentally new ideas for understanding the origin(s) of life on Earth. Those discussions led the NSF to award a total of \$4,213,049 (and a comparable amount from NASA) to participants.

Cost savings in the original budget will allow Freeland to host a second, far smaller workshop at UMBC in June 2018 that will collect, analyze and report assessment data of where this ambitious, administratively complex project met/exceeded/failed-to-meet its aims.



**Figure 5.3:** A 2016 Ideas Lab convenes 30 leading scientists under the mentorship of Know Innovation, a team of mentors, the NSF and NASA to form interdisciplinary teams exploring paradigm shifting ideas to increase our understanding of life's origin(s)

## 5E (Winter 2016) Gordon Research Conference for the Origins of Life

In January of 2016, Director Freeland presided over the international Gordon Research Conference for the Origins of Life, convening scientists from six continents (all seven continents if fieldworkers from Antarctica are included!) to discuss progress in understanding abiogenesis. Freeland raised more than \$100,000 to fund this conference, from NASA, the John Templeton Foundation, the Simons Foundation and the Gordon Research Conference organization.





# 5F (Winter 2015 - present) Development of Affective Learning at UMBC

In January 2015, director Freeland collaborated as Co-PI with the director of the Honors College and director of the Shriver Center to submit a successful grant for \$23,000 from the Hrabowski Fund for Innovation to establish and explore measurement (assessment) strategies for "affective" learning taking place at UMBC (self-awareness, ethics/integrity, intercultural development/perspective, social responsibility, teamwork, adaptability/resilience, innovative leadership, critical agency). Among deliverables of this grant have been a new First year Seminar class, "Character Equals Destiny: How and where can you build character at UMBC, and how would you know?" and active participation in the Provost's Teaching & Learning Symposium (September 2017). Early work from the project has been presented at the Lilly Conference on Evidence-Based Teaching & Learning (June 2017), the International Association for Research on Service-Learning & Community Engagement (IARSLCE), 2016 and the 2017 conference of the Association of Interdisciplinary Studies (section 5.4). Research is ongoing and informs a growing dimension of affective learning outcomes and assessment within the INDS curriculum. Further details of the project are provided at: https://affect-education.umbc.edu/

**5G (Fall 2014) "Concept Mapping Model, Academic Disciplines and Interdisciplinarity**" by Steven McAlpine published an article about concept mapping in *Crossing the Border:* 

International Journal of Interdisciplinary Studies Vol.2(1) 2014: 7-12. Concept mapping is an integral component in the INDS curriculum; in INDS 330 concept mapping is introduced with discussion of McAlpine's paper (*Abstract:* Why do we use maps? What sense of understanding does a map provide that a simple list of directions cannot? Beginning with an examination of the most useful properties of maps, we will then review a methodology for constructing a conceptual map used to explore the complexities of a topic or problem.) Students in INDS335 are asked to map their degree design, and in INDS 480 and 490 students are asked to map their research project.

## 5H (Spring 2014 - Spring 2017) The Baltimore Kinetic Sculpture Race

In the Spring of 2014, Steven McAlpine won a Breaking Ground grant for INDS in the amount of \$1,935 to form an interdisciplinary team of undergraduate students at UMBC who worked over 3 semesters to design, build and race an entry in the May 2015 Baltimore Kinetic Sculpture Race. The "Kraken Upcycle" was a thirteen foot high sea monster made of 2000 recycled plastic bottles (and many other repurposed and renewable components). Its construction allowed students the opportunity to explore - and physically represent - themes of sustainability. The INDS 430 course was designed as a new model of project based learning that provided opportunities for students in engineering, visual arts, environmental science, journalism, community psychology, education, and management to apply theories and methods they had learned in the classroom to a collaborative project that built strong relationships among academic departments and with communities in public education and downtown Baltimore. McAlpine worked with students to create publicity in the form of blog, video and signage.



Figure 5.5: The Kraken Upcycle in its third iteration, dubbed "Kraken Calamari" by the student team, won a design award at the 2017 <u>Baltimore Kinetic</u> <u>Sculpture Race</u>.

## 5I (Fall 2013) The Degree Design Workshop

In the Fall of 2013, Steven McAlpine won a Hrabrowski Fund for Innovation grant for INDS in the amount of \$2,400 to introduce INDS335, the Degree Writing Seminar. This course was developed by Eric Brown to provide guidance and incentive to INDS students during the semester in which they write their degree proposal. Prior to this innovation, degree plans were written as an extracurricular collaborative effort between the student, an INDS Program Advisor, and the student's faculty mentors. INDS335, which was introduced to coincide with the re-design of the INDS Degree Plan Proposal rubric, regularizes the degree design process, making it more efficient. It also enhances student understanding of interdisciplinary scholarship, develops proposal-writing skills, and further contributes to a sense of community among INDS students.

## 5J (Summer 2013) The UMBC Garden

In summer 2013, the UMBC Garden, a student-led project with faculty mentor and INDS staff member Jill Wrigley won a Breaking Ground grant for \$2,300 to build a shed to house tools and equipment for raised beds in which to grow vegetables on campus.

Since then, INDS (through Professor Wrigley) has helped the Garden project to raise an additional \$24,000 from winning the UMBC "Provelt" competition (\$10,000), and competing successfully for \$14,000 of additional funding from the UMBC Student Government Association. This money brought together disparate elements of campus, including multiple departments and programs, UMBC Facilities Management, Residential Life and others in a variety of projects that blend classroom work with applied learning and outreach to the local community in Baltimore City and the surrounding suburbs. INDS student (now alumnus) Andres Camacho used this on-campus opportunity to grow microgreens which were then sold to campus food vendor Chartwell's. He described his business model and interdisciplinary approach in his capstone presentation in May 2015.



**Figure 5.6:** UMBC students preparing raised beds for planting at The Garden at UMBC

# 6. TEACHING QUALITY: Describe how the department encourages high quality teaching. Describe the incentives and rewards that are offered, and the mechanisms in place for mentoring new faculty.

#### **6A Incentives and Rewards**

There is currently no formal incentive system in place to encourage teaching quality. As professional staff rather than faculty, core INDS staff are not eligible for incentive elements such as sabbatical or teaching awards. Adjunct faculty, as at other institutions, are likewise excluded from most incentive schemes offered by the university - all the more so when program budget remains constant. There has been a single opportunity for a small, merit-based pay increase to full time staff during the period covered by this self study.

This situation provides context for the ways in which the program has worked to encourage high quality teaching.

#### 6B Collaboration and Co-Teaching within the Program

The main strategy by which INDS has sought to improve teaching quality over the period covered by this APR is to reduce reliance on adjunct faculty and instead bring teaching "in house," to full time staff whose motivation involves the quality and success of the program as a whole. As stated previously, this in no way reflects upon the expertise or professionalism of adjunct faculty but reflects instead the simple truth that it is unfair to ask individuals paid only to teach a specific course to continually develop their work in parallel with rapidly emerging ideas for curricular reform based on program assessment (sections 3E and 4D).

A major component of this strategy has been to involve all core program staff in all courses according to their areas of specialization and their focus for program development. In an effort to revise the INDS 330 curriculum, bringing its two sections into alignment with each other and with the rest of the program, Director Freeland and Program Coordinator Brown have started to co-teach the course. Steven McAlpine co-taught INDS 430 with Dr. Brian Montgomery in Spring 2017 in an effort to connect the scholarship of interdisciplinarity (SOI) introduced in INDS 330 to the INDS 430 course. McAlpine, Brown, and Freeland collaborate to assess SOI in INDS 399, and Sauter, McAlpine, Brown, and Freeland collaborate to deliver workshops for INDS 490 and to assess 30% of each capstone project final grade (professionalism, presentation, SOI). These collaborative efforts have helped develop a continuity of instruction across the INDS curriculum that supports student development.

Between semesters, INDS instructors take seriously both institutional and informal feedback from students on the effectiveness of course instruction in order to make changes. They have also made a habit of doing in-semester adjustments based on informal assessment and feedback from students and colleagues. One of the advantages of co-teaching is having multiple perspectives on both course content and delivery, which enables nuanced course corrections during the semester. Evidence of the efficacy of the approach taken by INDS instructors is available in long term SCEQ trends. The most recent data (<u>Table 16</u>, Spring 2016) show an INDS program mean of 4.71 (out of 5) for teaching, compared to a university mean of 4.17.

#### 6C Workshops, Panels and Innovative Collaborations with Interdisciplinary Colleagues

INDS has used collaborations with several groups outside UMBC to add innovative aspects to its teaching. The program has begun a multiyear collaboration with Braintrust, a Danish public university/private consultancy partnership, and uses its tool CoNavigator in INDS 330 - see section 5C. A similar collaboration has begun with KnowInnovation - see section 5A. In both cases the main aim is to use tools and ideas from these partners to help students grow their abilities to integrate disciplinary perspectives.

Beyond this, INDS staff are regular attendees at the Association for Interdisciplinary Studies annual conference and the Individualized Majors Programs annual conference. Sessions at each of these provide opportunities for staff to learn about and experiment with teaching techniques developed by the larger community of interdisciplinary educators. Additionally, these conferences have resulted in collaborations with researchers and the adoption of texts for courses (see *Unflattening* by Nick Sousanis used in INDS 330), all of which support instruction in the program.

INDS staff also work through existing entities and partnerships at UMBC to advance the department's teaching. In 2012 Professor McAlpine designed and facilitated a summer faculty workshop for the scholarship of interdisciplinary research based on case studies from his research at Harvard Project Zero (Miller&Boix Mansilla 2004), the Repko textbook (*Interdisciplinary Research* 2008), Klein (*Crossing Boundaries* 1996), and Newell (*Interdisciplinary Integration* 2006). From 2014 onwards, Director Freeland has been working with the directors of the Honors College and Shriver Center to explore learning beyond the cognitive domain (see section 5.6). Since 2015, Sauter and McAlpine have represented INDS in a committee comprising all sister units of UAA to improve assessment (See section 2A).

#### **6D Faculty Mentor Development**

Curriculum developments described in *Section 3: Curriculum* (the addition of INDS 335 and INDS 339, together with modifications made to INDS 480 and INDS 490) both expand and formalize the extent to which all INDS students are required to seek input from their faculty mentors. All of this has led to notable improvements in the overall quality of successful degree completion, including capstone research projects. Less clear is the extent to which these changes have led to greater satisfaction with the program on the part of faculty mentors. Within the past 24 months, two (admittedly closely interacting) faculty mentors from a single department have expressed the opinion that they do not feel clear or empowered in their role with INDS students. More anecdotally, the staff of INDS have often been surprised at the extent to which faculty mentors express surprise or confusion regarding elements of students' degrees to which they have quite literally "signed off" - from capstone research grading rubrics to students' plans for research and reading. The program has worked steadily to understand and mitigate such problems, but it remains an important task for the near future to explore systematically the extent and nature of such problems and how faculty mentors might best be brought to greater confidence and clarity without burdening them in their voluntary activity for the program.

# 7. SERVICE: Describe service offered to the department, University, public, and profession.

# **7A Stephen Freeland**

2015-present: Member of the Advisory Council to the BioLogos organization
2016-present: Member of the (UMBC) committee for academic integrity
2014, 2016: Member of Biology department faculty hiring committees
2014-2017: Guest speaker for UMBC orientation and recruitment activities
2013-2017: Member of the Provost's taskforce, later committee, for Interdisciplinary Activities
2014-2016: Reviewer for prestigious scholarship applications
2014: Guest speaker for the Undergraduate Symposium in the Chemical and Biological Sciences

# **7B Steven McAlpine**

2017: Search Committee Chair for Program Coordinator in INDS

2017: Guest lecturer for Grand Challenges Scholars Program

2012- present: Guest lecturer for the Erickson School

2006- present: New Student Orientation Advisor

2006 - present: Workshop presenter at the annual AIS conference

2014 - present: UMBC Transportation Committee member

2012 - present: INDS program representative at Visiting Student Days

2012: Search Committee member for INDS Director

2006-2014 + 2018: Advisor to the INDS Council of Majors

# 7C Carrie Sauter

2017: Search Committee chair for Administrative Assistant in INDS

- 2017: Search Committee member for Program Coordinator in INDS
- 2017: Search Committee member for Assistant Director for the Office of Academic and Pre-Professional Advising
- 2015 present: Treasurer, Phi Kappa Phi Chapter 22BC
- 2012 present: New Student Orientation Advisor
- 2012 present: Department representative at Visiting Student Days

2009 - present: Undergraduate Program Director for INDS

- 2009 2016: Professional Staff Senate, Senator
- 2014 2017: Professional Staff Senate Mentoring Committee
- 2012 2013: Professional Staff Senate, President
- 2012: Search Committee member for INDS Director
- 2011 2012: Professional Staff Senate, Vice President

# **7D Eric Brown**

2017 - present: URCAD, Undergraduate Research Award Committee

- 2017: URCAD session moderator
- 2016 present: Advisor to The Garden @ UMBC
- 2012 present: New Student Orientation Advisor
- 2011 present: New Student Book Experience Committee
- 2002 present: Human Context of Science and Technology Committee

# 8. STUDENT PROFILE: *Discuss data and trends regarding enrollments, degrees, and demographics.*

Some trends in student specialization are evident from recent graduating classes. Slightly more than one-third of our graduating students have at least one disciplinary "foot" in STEM disciplines, although a slightly smaller fraction (approximately one-fourth) were mentored by one or both faculty from either CNMS or COEIT. Clusters of recent student interest include those embracing a growing national trend towards *biopsychosocial* models of health (e.g., Borrel-Carrio et al., 2004), arts integration and "STEAM" (e.g. Radziwil et al., 2015), and engineering-related futures that do not require ABET accreditation such as engineering management or engineering education (which does require education certification). Such themes, however, should not be over-interpreted: the INDS program advertises to students that it offers "*A degree as unique as you are*," and this accurately describes the diversity of our students' degrees.

Since the last APR, enrollment in the INDS major has decreased from 159 to 111 (Table 10). It is important to note that during this same period, the number of degrees awarded has remained the same, an average of 21 graduates per academic year. The reduction in enrollment can be traced directly, in large part, to INDS staff redirecting students to other majors earlier in the student's degree formulation, maintaining with greater efficiency those that are a good fit for this program. During this same time period degree plans approved by the ISC have also declined. Again, it is important to note that the program has maintained a steady number of degrees awarded. In other words, over this APR period, a declining number of students leave the program (and perhaps UMBC) after degree plan approval, but before graduation.

The program requires that a student have earned a minimum GPA of 2.5 at the time of degree plan submission to the ISC. Historically, INDS students have had an average GPA significantly higher than this requirement, and indeed slightly higher than the overall UMBC undergraduate GPA (see table 10).

From 2012 to 2016, an average of 90% of declared INDS students were enrolled full-time at UMBC (minimum of 12 credits per semester) (see table 10A). More were female than male (58%:41% respectively), the majority of the students were white, (52% white, 17% black, and 15% as Asian) and 89% are aged 18 to 24.

Table 12 lists all students who have had a degree plan approved from fall 2010 through spring 2017. Their faculty mentors plus their affiliation are also identified. Of 157 approved degree plans, 58 (37%) have at least one faculty mentor from a STEM-affiliated field, meaning either the College of Natural and Mathematical Sciences or the College of Engineering and Information Technology..

UMBC as a whole has a 50% transfer student population. Transfer students come to UMBC from a variety of higher education backgrounds. As we advise at transfer student orientation in the summer and winter sessions, we encounter students who are ready to start our curriculum with the writing-intensive INDS 330 and our degree writing seminar, INDS 335. In many of these cases, students have earned an associate's degree, completing the majority of their general education requirements, and they are looking to finish their major in roughly two more years. We work closely with these students to ensure that, through INDS 335, they develop a sound timeline that would provide a reasonable path towards graduation.

#### 9. STUDENT ADVISING: Describe how undergraduate students are advised.

Students join the program at several different points in their academic career. Some enter UMBC with INDS as their declared major. Others declare the major during new student orientation. A majority, however, find the program after one or more semesters enrolled at UMBC via word-of-mouth from others on campus (students, faculty, staff), searching online, or responding to outreach, such as guest lectures outside of the program.

Students who express interest in the program by phone, email or unscheduled "drop ins" are guided to create a formal, in-person appointment unless initial screening makes it clear that they should be referred to another program (e.g. they seek a degree that already exists). An initial, face-to-face meeting also results in referral to another program unless the student demonstrates a good fit for the individualized degree process, in which case they are assigned to a member of INDS core staff as their primary advisor. The primary advisor meets regularly with their students, including clearing the student to register for classes each semester, providing any permissions to enroll in INDS courses, and reviewing graduation requirements. More than this, the advisor will explore, in depth, the student's motivations and postgraduation goals. INDS advisors regularly attend advising training and serve at new student orientation, a comprehensive model of advising at a student's first experience on campus.

Beyond this primary advisor, INDS advising has been shifting into complementary, team-based approach effort. Students now meet with and be taught by other program staff at multiple points in the program. For example, the instructor of INDS 335 Degree Writing Seminar interacts with every student coming through the program. When enrolled in the course, students meet the instructor each week in the class, but also meets weekly with their primary advisor to receive input on their classwork. At a slightly lower frequency, the student meets with their faculty mentors. Similar patterns are repeated in INDS 399, INDS 480 and INDS 490.

In addition to the advising provided within the program, INDS majors identify two degree mentors representing the two most significant, different disciplines represented in the their degree plan. These mentors meet individually with the student as well as participating in stakeholder team meetings for degree design and capstone development. These faculty mentors provide discipline-specific advising on the content matter from their affiliated department.

As with other programs at UMBC, advising is likely to incorporate further expertise. Students may belong to a scholar program or the Honors College, they may participate in athletics, or seek input from the Career Center, Shriver Center, or Women's Center, to name but a few. A deepening collaboration with the Office of Undergraduate Education (OUE), a sister unit within UAA, brings their special expertise in helping first year students (whether freshmen or transfer) to make a smooth transition into UMBC.

The program perceives that this model matches the goals specified in UMBC's strategic plan to "systematically improve the quality and consistency of academic advising and mentoring of undergraduate and graduate students." and to "better define expectations for advisers and peer mentors by examining successful models on campus for replication, and revise standards, training, and support accordingly." A further goal is to "increase degree completion and shorten students' time to degree." The INDS degree program is arguably at the forefront here as the program requires each student to design, as part of their degree plan, a feasible timeline towards graduation.

# 10. STUDENT RESEARCH: Discuss undergraduate research and the number of graduate theses and dissertations for the last five years; student publications, exhibitions, and professional presentations. Include list of undergraduate student research projects for the past three years in appendix.

UMBC's University Vision states, "Our UMBC community redefines excellence in higher education through an inclusive culture that connects innovative teaching and learning, research across disciplines, and civic engagement." Interdisciplinary Studies requires a capstone research project from all students, and encourages additional research. The program's three-semester sequence of courses, INDS 399 Guided Reading in INDS, INDS 480 Capstone Project Seminar, and INDS 490 Capstone Project. These courses support each student in formulating a capstone idea, refining the research question and then creating a detailed plan including specific deliverables and a carefully planned timeline to complete the project. Throughout the entire execution of the project, the student works as the center of a team comprising INDS primary advisor (and other staff as necessary), their faculty mentors and any other experts relevant to the specific project.

Students have the option of completing a type 1 or type 2 capstone project. In a type 1 capstone, students submit one paper, approximately 10,000 words in length, which utilizes the appropriate scholarship of interdisciplinarity (SOI) to weave insights from two or more disciplines into a coherent, interdisciplinary narrative. A type 2 capstone project comprises two different components: an artifact and a shorter, accompanying paper of approximately 5,000 words. The artifact is any research deliverable other than the scholarly paper (thesis) of a Type 1 capstone. Examples of artifacts include scientific experiments, gallery or museum exhibits, film/video/audio creation, live performance, academic publication or creative writing (fiction or non-fiction). The accompanying paper is a shorter version of a Type 1 capstone as described above.

All Capstone Project titles from Fall 2010 to Spring 2017 are listed in Table 13. Graduating seniors present their capstones at a formal event, open to the public, which faculty mentors and members of the ISC are encouraged to attend. These are now held in the Center for Art, Design and Visual Culture as a way to foster community relationships within the building that INDS inhabits.

Undergraduates in INDS are also encouraged to share their research projects through participation in Undergraduate Research and Creative Achievement Day (URCAD), publication in *The UMBC Review (*the university's journal of undergraduate research) and Bartleby (the university's creative journal), and through presentations at academic and professional conferences. See Table 20 for a complete list of awards and honors.

Undergraduate Research Awards (URAs) are competitive and provide additional funding for students whose intended research requires money. Each year, INDS students have been awarded URAs to assist in their capstone research. See Table 20 for additional data on URAs and other awards.

Program staff perceive that these activities meet the goal specified in UMBC's new strategic plan to "Vigorously promote a campus culture of multidisciplinary collaboration and multidisciplinary research, scholarship, and creative activity."

## 11. FACILITIES: Evaluate the adequacy of space (classroom, research, office, student congregate space), laboratory and core facilities resources; library and computer resources.

An account of facilities for INDS is provided in Table 15. Physical relocation of the program in August 2014 (the approximate mid-point of the period covered by this self-study) brought some significant improvements. INDS core staff all agree that in its new location the program is better connected to broader campus activity. Greater foot traffic around the offices provides more visibility for the program. We notice colleagues "dropping in" more frequently, and find ourselves more likely to step out of our offices in order to visit in person rather than by phone or email. Set against these benefits are three specific concerns which the new location has.

#### 11A Conference Room/Classroom

Since moving to its new location, INDS has lacked a conference room. This creates difficulties for program operations. Instead the program was assigned a "pilot" classroom, FA002, which allows INDS priority for booking all academic classes. However, the Registrar's office can assign classes to this space if no other academic activity is occurring at a given time. INDS hosts many events and meetings that do not qualify as academic activity and are therefore invisible to the Registrar's office. All this leads to unexpected scheduling conflicts as we discover that meetings and events scheduled prior to the semester need relocation due to the placement of non-INDS classes into the room. The loss of a conference room also removes any specific space within which INDS students may study and/or interact outside of classes.

Students and instructors also report that FA002 is poorly ventilated, noisy due to its proximity to building machinery and considerably colder than other classrooms.

#### **11B** Administrative Space

The program's reception office (FA009) is small and awkwardly shaped. Student workers share this cramped space with the program's only printer/copier and all of the program's general storage items. It looks more like a storage room than an office or a reception area so it is not efficient as a point of entry for students, faculty and staff who are initiating contact with the program. The carpet is ripped and very dirty, having not been replaced during the building's renovation. The lack of adequate storage space and small size of this room leave important filing cabinets scattered throughout all staff offices, hampering efficiency.

#### **11C** Office Space

The program would benefit from a space in which all staff offices are congruent. At present, Assistant Director McAlpine and our Director Emerita occupy offices separate from those of the other program staff. All offices are generally larger than needed and lack windows. Office walls are cement bricks with no drywall which makes for a drafty and cold environment that is unwelcoming when advising students. Airflow is poor and the filters are not changed regularly. The remodeling that continues across the hall from the main block of offices has created considerable dust and dirt that has directly impacted the department. INDS would be better served if its four adjoining large offices were reconfigured so that all staff could be in the same space. Given the lack of windows in any of the program's offices, it would improve working conditions if lighting were full spectrum.

**12.** CLIMATE: Assess the scholarly community in the department, co-curricular activities for students, quality of student mentoring, esprit de corps, critical mass of faculty and students, and activities that promote diversity among students and faculty.

#### 12A Scholarly communities in the program

The primary scholarly community within the program is the cohort of students that is founded in INDS 330, the gateway course to the major. During the period of this self-study, instruction for the course has moved "in house" (Freeland, McAlpine and Brown) to ensure that students not only become familiar with each other but also with core staff of the program. The Honors section of this course (INDS 330H) has evolved to make a special contribution by developing a campus-spanning role playing game, played by students of the main sections, based on the documentary film "Cafeteria Man" by 1982 INDS alumnus Richard Chisolm. This "Organic Panic!" game was launched in Fall 2014 and has been played by INDS 330 classes every semester since then, as well as at the 2017 AIS conference at UMBC. Each semester, Honors students bring their own skills to refine and improve the game. The most recent version of the game requires 20 actors to perform, including student, staff and faculty characters.

INDS builds on this foundation in ensuing classes of the INDS core curriculum, most notably (INDS 335, 480 and 490). Over multiple semesters, students come to understand closely each others' scholarly and professional interests through discussion, peer presentations and peer review of written work. We have found that this repeated exposure to the work of classmates results in nuanced, thoughtful and empathetic intellectual engagement for all of our students. In particular, the INDS 335 "Mock ISC", a co-curricular activity in which panels comprising students with approved INDS degree plans read and critique the degree plans of students who are preparing degree plans. Experienced students are able to give remarkably insightful comments to their colleagues, often pointing exactly to the questions that the "real" ISC would also note.

The ISC forms a second focal point for community. Comprising eight UMBC faculty and administrative staff, two INDS students and five (non-voting) INDS staff, the committee provides a rare space for individuals from across the colleges and divisions of campus to share values and perceptions in the process of maintaining rigorous standards for approval of new degree plans. The two hour committee meetings, while focused on the examination of degree plans, allow for both formal and informal dialogue about a great range of issues at the University.

Connecting and feeding into both of these communities, members of the INDS staff regularly discuss scholarly articles regarding interdisciplinarity, attend and present at the annual AIS and IMP conferences, debriefing what they have seen and heard afterwards. Weekly staff meetings, semi-annual staff retreats and curricular elements (most notably Scholarship of Interdisciplinarity panels in INDS 399, and panels for the defense of capstone project ideas in INDS 480) provide multiple opportunities for comparing perceptions and assessment, including assessment and discussion of individual course contributions.

#### **12B Co-curricular activities for students**

*12B(i) The Council of Majors:* has historically provided an important locus for student interaction in the program. It took primary responsibility for the annual Petrovich lecture, named to memorialize former INDS director Slobodan Petrovich, which invites a prominent researcher from the Baltimore-Washington metropolitan area to visit UMBC and present ideas which

synthesize several academic disciplines. Students of the INDS Council of Majors (COM) have traditionally planned this event by selecting a speaker, preparing a budget for the Student Government Association (SGA), and inviting other UMBC departments to co-sponsor. The Council of Majors has also hosted several "concentration" brown bag lunch meetings where an expert or recent graduate in areas such as criminal justice and neuroscience spent an hour discussing their field with students.

In 2016, however, the students' Council of Majors ceased operations. This followed a period of several years during which it was no longer a student led activity, and instead occupied significant staff time to operate. During a period of disruptive staff turnover, and major commitments such as the the national AIS Conference, a decision was made to suspend the CoM until such time as students and staff identified a clear way forward. In part because of this hiatus, in AY 2017/18 there was no Petrovich lecture.

12B(ii) The Herbert Run Greenway: Was initially designed in an interdisciplinary studies seminar taught in 1995 by current Director Emerita Patricia La Noue, continues to be used university-wide for stewardship activities, recreation, and appreciation of the relationship of the built and natural environment. Director La Noue has mentored four interns during her retirement and their efforts have resulted in HRG signage, a Facebook page, a new website, and several tours, including two sessions at the 2017 AIS conference.

12B(iii) The Kinetic Sculpture Team: began in 2014 as an INDS 430 Interdisciplinary Seminar funded by a Breaking Ground grant (see Section 5: Faculty Research and Scholarly Activity). The fall semester focused on research of an environmental issue and responsive designs proposed by students, and the spring semester focused on a project timeline to build, test, and race a kinetic sculpture. The first kinetic sculpture (The Kraken Upcycle) won the awards at the 2015 and 2017 Baltimore Kinetic Sculpture race, and the 2016 race in Lowell MA. Kinetic sculpture team members Heather Mortimer and Lucas McCullum were guest presenters at a kinetic sculpture workshop at AIS 2017.

12B(iv) The INDS Living Learning Community: In 2014, INDS applied successfully to join other academic units at UMBC which offer "Living Learning Communities" (LLC's). Since then, approximately 25 students have chosen to share one corridor of a residential hall on the basis of shared academic interests that cross disciplinary boundaries. In 2017, the INDS LLC merged with the well-established Discovery Scholars LLC operated by our sister unit in UAA, the Office of Undergraduate Education. Students retain distinct identity as INDS or Discovery LLC members, but share living space and substantial elements of programming. This provides major benefits moving forward, as part of a broader strategy discussed in Sections 15: Evaluation and Section 16: Future Directions.

12B(v) The INDS Main office: provides another, important space that sets the atmosphere for the program. The program uses 3-5 student workers (both INDS and non-INDS majors) to help our staff with different projects and tasks. These students form the nucleus for student interactions and a non-curricular interface connecting staff with students. As INDS evolves, administrative assistant Cudzilo is currently working towards a new model by making each of these student worker positions project-based; possibilities include a focus on alumni relations,

social media, advertising, and general administration. Cudzilo is collaborating with other units on campus (including the Womens' Center, the Career Services Center and Student Life) to generate a picture of best practices for this development.

#### 12C Quality of student mentoring

Through additions to the INDS curriculum, every student now interacts with every member of the staff during the progression of their degree. In this manner, students receive coordinated support for writing and oral presentation skills, degree design and undergraduate career planning, development of post-graduation goals and mentoring in research skills.

Through the process of degree plan review, students receive mentoring from the members of the ISC. This sometimes takes the form of one-to-one mentoring. ISC member Christopher Varlack (English department) has helped many students improve their writing. In one instance this mentor relationship turned into a published an article in the volume *Responding to Call of Duty: Critical Essays on the Game Franchise (Holtzman and Varlack 2017)*.

Each INDS student is required to have two mentors to support the degree plan and capstone project, one of whom must be full time faculty at UMBC. INDS students therefore have the advantage of multiple areas of expertise and methodologies to inform their degree and capstone research. From the initial triangle meeting to discuss the degree plan, to more detailed meetings during the student's capstone seminar semester (INDS 480), to the actual capstone (INDS 490) project meetings, students have the same collaborative team to coach them through at least three semesters of development. As might be expected, the quality of the mentoring students receive during this part of the INDS process can be uneven. The department has no mechanism for rewarding faculty participation in this mentoring process and relies on goodwill and collegiality to secure mentors for students.

#### **12D Esprit de corps**

The collaborative, caring, compassionate spirit among the staff at INDS is at the core of the program's atmosphere. The starting place for all of our efforts is how can we best serve the diverse, hard working students of UMBC. The curricular redesign that has taken place over the time period of this APR, the growth of applied learning activities, the drive to measure and grow the affective competencies of our students are all focused on developing a space for students that feels welcoming, supportive and conducive to achieving excellence.

Alumni accounts of how the program prepared them for life after graduation (Section 13: Profile of Graduates) provide an assessment of this claim.

#### 12E Activities that promote diversity among students and faculty

INDS activities to promote diversity among its students and faculty are largely restricted to training activities provided by UMBC. Different members of INDS staff have, for example, trained for improving accessibility of under-represented minority groups during the hiring process, Title 9 compliance, compliance with the Americans with Disabilities Acts of 1990 and 2009.

Individual staff members share their training as situations demand but our primary strategy is to remain cognizant that our own expertise is far superseded by other, specific units on campus (Student Disabaility Services, the Mosaic Center for Culture and Diversity, the Womens' Center etc.). We maintain strong relationships with these resources and bring them in wherever circumstances demand.

## 13. PROFILE OF GRADUATES: For the past five years, indicate the number of graduates and survey 25 of them for information on job placements, and continued contributions to the field or profession. Include list of job placements in appendix.

INDS has graduated 126 individuals over the past five years (May 2012 to May 2017). Each one was surveyed by email with the following questions to yield the results shown below:

- Please tell us about any additional education you have earned and your employment history since you graduated from UMBC with an Interdisciplinary Studies degree.
- How have you contributed to the field/profession?
- How has an interdisciplinary undergraduate education made an impact in your life?

The sample of 25 responses below therefore represents approximately 20% of our graduates for the period covered by this self study.

#### 13(i) Nimasha Fernando, May 2017, Intercultural Health

Nimasha is currently enrolled in the Masters of Public Health program at the University of Maryland School of Medicine.

"As a public health student, I have been fortunate enough to continue my research collaboration with the University of Maryland School of Pharmacy investigating Hispanic immigrants' health experiences and barriers in the Baltimore area as they transition from hospital to home care while receiving chronic disease treatment. This research is a continuation of my Capstone research project for INDS ...

"In the public health field I am constantly interacting with professionals from other fields and disciplines such as social workers, medical doctors, policy makers, entrepreneurs, and a variety of researchers. As an Interdisciplinary Studies student, I learned to see the strengths each different discipline could offer to address a problem and create an optimal solution no discipline could independently develop. Instead of seeing divides between my colleagues from different fields, I see connections and ways to build bridges by avoiding stereotypes of certain fields and communicating with shared language. This perspective will help me work more effectively with colleagues from a variety of professions to help create more comprehensive culturally appropriate health programs as a future physician aiming to promote integrative care."

"The hours of advising I received in addition to the processes of repeatedly thinking through my beliefs from designing my degree to defending my Capstone gave me clarity in my passions that I would not have without the INDS program. The INDS program has to exist to allow future generations of students to have this same opportunity to pursue their passions and develop their beliefs."

#### 13(ii) Maniraj Jeyaraju, May 2017, Health Ethnography

Maniraj is a first-year medical student at the University of Maryland School of Medicine. "My INDS degree has provided me: (1) critical thinking skills (2) tools to facilitate interprofessional conversations (3) fostered my understanding of research methods and application to research projects and (4) developed a sense of curiosity to understand problems from multiple perspectives." "Specifically, my specific concentration was an important foundation for my medical education, as I became aware of the cultural contexts and determinants of health and (more importantly) how to address conflicts between culture and medicine."

"My INDS degree has opened up doors to unique research opportunities and became a talking point during conversations with faculty/health care professionals. Understanding the limits of approaching a problem from a single disciplinary perspective and recognizing conflicts in cross-disciplinary communication helped foster questions with disciplinary experts on future directions of the discipline/research."

"For example, I had a conversation with a bioinformatician here at UMB. Though he's involved in a multidisciplinary group project, clinicians often do not understand the work and data processing involved from his side. He wishes that clinicians would have a working knowledge of bioinformatics, how data is processed into a database, and what kind of subsequent information can be analyzed and produced. The importance of thoroughly thinking through data management and design is underestimated by clinicians who use/enter information into databases. Such insight from the conversation could be attributed to my understanding of disciplinary boundaries and lack of effective cross-disciplinary communication. In turn, conversations like this will help guide the skills I develop as a medical student to become a competent clinician and manager of interdisciplinary/inter-professional teams in the future."

#### 13(iii) Rosa Rada, May 2017, Food Systems Policy

Since graduation, Rosa has been serving as a Bill Emerson Hunger Fellow through the Congressional Hunger Center.

"... I am now completing my policy placement at the National Conference of State Legislatures in Washington, DC, where I am working on hunger and immigration policy."

"I have contributed to the fight against hunger, poverty, and structural racism through my work as a Bill Emerson Hunger Fellow. In my 6 months in San Diego, I launched the organization's story collection efforts, contributed to research reports, and co-led a months-long training on racial equity. All of these projects have produced ripple effects and tangible evidence of institutional change. The stories I collected on college student hunger, charitable giving, and community gardening are continuing to be used for a multitude of research, education, and advocacy efforts in San Diego and across the country. I have begun effectively bridging my field site experience in San Diego with my national policy work in DC."

"... Through the interdisciplinary studies program at UMBC, I was able to develop (and nourish) an intellectual curiosity and confidence that has better prepared me for this work than any other course of study imaginable. I am now in a program where my peers hail from the most prestigious institutions in the country -- Yale, Stanford, Cornell, etc. -- yet I feel, with certainty, that I am an equal."

#### 13(iv) Elizabeth Saloka, May 2017, Gender Equality in Computing

Since graduating, Liz work at Booz Allen Hamilton as a Software Developer. She spends a lot of her free time volunteering with girls in technology organizations. "I am a Software Developer for a large internal project, which aims to transform government (and other high security) work spaces. I currently work on the user interface for the web application component." "It allowed me to do exactly what I wanted to do in life. Not only am I working as a Software Developer, I am also spending a lot of my time working with girls in technology outreach organizations. I'm so grateful for my INDS education, as it opened more doors for me than any other major would. I am also looking to hold a project manager position in the future, and the courses that I took for the girls in technology outreach portion of my major have jump started the preparation for that."

#### 13(v) Brendan Berger, May 2016, Educational Software Development

Brendan now works as software engineer for Northrop Grumman, developing a series of tools that help to enhance other developers' understanding and ability to develop automated application tests.

"Through my degree, I have built software for users for educational purposes. Every time, I oversaw the entire software development lifecycle from user interviews, requirements gathering and analysis, development, functional and acceptance testing, and integration guides. Every project was guided by the understanding of the educational process and how a piece of software can be designed to teach and facilitate."

"While my career is primarily a computer science and software engineering career, my experience with my educational software engineering degree has helped me ... to build software that everyone can understand, technical or not, facilitating communication between people of diverse academic backgrounds where such communication may not otherwise be able to occur. In short, my degree granted me an ability to look at software through a diverse mosaic of perspectives such that a universal understanding can be created."

#### 13(vi) Priyanka Prasad, May 2015, Neuroscience of Aging

Works as an Intensive Individual Support Services (IISS) therapist; Currently in an MPH program at Thomas Jefferson University in Philadelphia, PA "this [INDS] approach is crucial for public health, which requires collaboration of many different fields to create comprehensive, thoughtful solutions to population health problems"

#### 13(vii) Michelle Seu, May 2016, Human Aesthetics

Started working as a research fellow in the Johns Hopkins School of Medicine Department of Plastic and Reconstructive Surgery in September 2016 while continuing work as an illustrator for Educators Connecting Research to the K-16 Classroom.

"As a research fellow, I used materials science engineering knowledge to develop innovative solutions for clinical problems ...Ultimately, our research could be used to help patients with massive soft tissue defects following mastectomies and battlefield wounds."

"Interestingly enough, my INDS senior thesis graphic novel is what helped me get my job as a research fellow. I brought it on a whim to my interview with Dr. Justin Sacks, my current research mentor. He was intrigued when I told him what I did outside of the typical STEM/pre-med work. Within a few minutes of reading my comic, he told me I was hired. I will begin medical school at the Loyola Stritch School of Medicine in Chicago on July 30. I do not have an assigned email address yet, but I should be coming back to Maryland during my mid-semester break (9/29 - 10/7). I should be able to make it to campus."

#### 13(viii) Paul Vanik, May 2016, Biomedical Science and Healthcare Systems

Paul has continued his education through an independent business study in sales, marketing, management, and accounting, He is currently working as an accountant for a management consulting company.

"I am a life-long learner, who takes an interest in many topics because I can see connections between seemingly unrelated things. This helps me to learn new things quickly and to be a valuable contributor to my team."

#### 13(ix) Andres Camacho, May 2015, Entrepreneurship and Digital Communication

Andres has worked on a Michael Moore documentary and produced an interactive documentary of his own.

"[INDS] taught me how to engage with people from various disciplines." "I will begin an MFA program in documentary film at UCSC in the fall."

#### 13(x) Sharde Hoff, May 2015, *Neuropsychology*

Sharde is a law student at Howard Law School in Washington, DC. She has been employed at the American Bar Association, a non-profit that filed human rights complaints to the UN, and for a law firm as an administrative assistant.

"My INDS degree is a great conversation starter in interviews, there aren't many neuropsychology majors in the legal field."

#### 13(xi) Yoo-Jin Kang, May 2015, Psychosocial and Cultural Perspectives on Violence

Yoo-Jin secured a Karel Fellowship for Public Interest Communications and a position as National Programs Coordinator for the The Center for Mind-Body Medicine. She is currently working as a Victim Advocate in Hopeworks of Howard County.

"I attended AIS conference and won poster competition for "Tale of Two Survivors" poster; Spoke at 2015 frank talk and discussed INDS concept "bridging the gap" in understanding between public health issues and public knowledge."

"[INDS] has impacted my life immensely! To have been able to personalize my education to study the connections between culture, society, and violence continue to shape me today. INDS research concepts like bridging the gap and creating common ground help me identify and tackle complex problems from health communication to discussing racism."

"I can't thank the INDS family enough-- I am so grateful for the support and for the opportunities I have been given through being in the program."

#### 13(x) Rachelle Epstein, December 2014, *Bio-Cultural Hominid Anthropology*

After graduation, Rachelle continued her education at Towson University and earned a Master of Science degree in Forensic Science. She interned for the Baltimore Police Department Homicide Division, worked for two years as a Crime Laboratory Technician (Crime Scene Investigator) for Baltimore Police Department, and is now employed at the Prince George's County Police Department as a Forensic Chemist, specializing in DNA Analysis. She also teaches a graduate-level course as an Adjunct Instructor at Towson University in Crime Scene Investigation. "I have completed a research project/paper with Towson University, entitled, "Investigation of Forensic DNA Methylation Profiling as a Method of Age Estimation Using Melt Curve Analysis."

"As a working member of the Crime Scene Unit with Baltimore Police Department, I assisted in the detection, preservation, and collection of evidence from crime scenes. Now, as a DNA analyst, I aid the Prince George's County Police Department in identifying criminal offenders and testifying to those findings in court."

"Also, I am giving back to students by teaching in the evenings. Many of my open forum lectures are inspired by INDS 330. I let the students lead the discussion for many of the topics during the second half of the semester."

"The INDS undergraduate education made a huge impact on my life. My graduate research was absolutely informed by my INDS capstone project. Not to mention, forensic scientists are a multifaceted group of professionals, who must use bridging strategies to work with all of the evidence presented to them. I began my profession with a great understanding of exactly how I could piece together the breath of knowledge we are expected to be accountable for, while also developing depth."

#### 13(xi) Suraj Vyas, December 2014, Water Resource Management and Policy

After graduating, Suraj secured a place at the University of Baltimore School of Law (J.D., May 2017). He was admitted to the Bar (State of Maryland, Dec 2017). He currently works three jobs: (1) In-House Counsel at Rising Sun Engineering & Consulting, (2) Pro-Bono Attorney at Disability Rights Maryland, (3) Attorney at Law at The Law Offices of Suraj A. Vyas, LLC.

"As an attorney for an engineering firm, I mostly focus on contracts and delay damages claims. However, my time at Disability Rights Maryland has been truly rewarding as I am allowed the opportunity to work with clients who are denied Medicaid, who are denied acceptable schooling conditions based on their disability, whose houses are being foreclosed due to tax issues, and whose criminal records have crimes in them that they never committed. I am allowed the opportunity to make their lives better. As for my own law firm, I recently opened it (less than a week ago), but have a few clients already and am looking forward to making a name for myself in the legal community."

"[INDS] always is a talking point at job interviews. I interviewed at two firms yesterday about putting together an "of-counsel" situation with my new firm and they both asked questions about the INDS program on my resume and I told them how it allowed me to create a major that I was truly passionate about and allowed me to view the world and work I do with more than just one lens."

#### 13(xii) Samantha Hawkins, May 2014, Visual Research Methodology

Samantha is completing a PhD program at Harvard University in Sociocultural Anthropology with a focus in Media; she will receive a Master's degree in anthropology from Harvard in May 2018. As a teaching fellow at Harvard, she has taught nine courses to undergraduate students, including a self-designed course utilizing interdisciplinary curriculum, "Competitive Beauty: Exploring Race, Gender, and Nationalism through Pageantry." Her employment history includes the Derek Bok Center for Teaching and Learning as a Media, Literacy, and Visualization Fellow.

#### 13(xiii) Yohka Tanaka, December 2013, Social Entrepreneurship

Yohka has served as a interpreter/translator for the japanese language at NGO Peace Boat, and assisted refugees in Tokyo at Refugee Assistance Headquarters within the Foundation for the Welfare and Education of the Asian People. He is currently an organic farmer in Japan who does not use pesticides and fertilizers, including organic ones. As an undergraduate, his initial goal was to work in a less developed country where world hunger exists the most. But after regular conversations with Professor Jill Wrigley in INDS, he was made aware of "land grabbing", and changed his focus to working in developed countries because they produce the problem of hunger.

"I want to contribute to ending world hunger, and I believe if I can spread this farming method first in Japan and hopefully throughout the world, ecology will be sustained and food will be produced more efficiently. It has been two years since I became a farmer. I now produce about 4000 pounds of potatoes, 2000 pounds of pumpkins, 500 pounds of tomatoes, etc. without any fertilizers, pesticides, insecticides. The amount of harvest per acre is more than the average of conventional farmers."

#### 13(xiv) Jason Allinder, May 2013, Biopsychosocial Aspects of Sports Injuries

"[INDS] has assisted me in learning how to research a topic at my own discretion to gain insights. It has given me the confidence to learn a complex topic as well as trust myself to become competent in an unexplored area of academia."

#### 13(xv) Nicole Kazi, May 2013, Political and Cultural Aspects of International Development

After graduating, Nicole completed a Masters of Liberal Arts at Johns Hopkins University which included an internship at the National Archives. She has been working for the past two years as a Program Assistant in the International Development at Johns Hopkins SAIS in Washington, DC.

"[The INDS program] allowed me to learn about various topics and become a critical thinker. I never had to choose one subject to learn about. I was able to continue that in my Masters program."

#### 13(xvi) Asif Majid, May 2013, Global Peace Building and Conflict Management

"Since graduating from UMBC in 2013 with my INDS degree of Global Peace Building and Conflict Management, I went on to receive a Masters in Conflict Resolution from Georgetown, a direct continuation of my work at INDS...At Georgetown, I was named a Research Fellow for The Laboratory for Global Performance and Politics ... I completed my Masters in 2015, with a thesis focused on how theatre organizations around the world intersect with conflict ... [and then] chose to come to The University of Manchester (UK) for a fully-funded PhD in Anthropology, Media, and Performance. My dissertation supervisor, James Thompson, is one of the world's experts at the intersection of theatre and conflict. My current research focuses on making theatre with British Muslim youth as a way to understand the sociopolitical narratives they face in contemporary Britain. I was named an inaugural Lab Fellow with the Lab at the beginning of my tenure at Manchester, which coincided with also being named a Global Cultural Fellow with the University of Edinburgh. Throughout all of this, I have been developing my own practice as an artist... I routinely present at conferences of academic associations internationally, such as the Peace and Justice Studies Association (US), the Royal Anthropological Institute (UK), and the Islamic Society of North America (US) ... I continue to publish my work in a variety of forms, including in peer-reviewed journals and popular media ...

"I would not be where I am today without UMBC's INDS program. ... INDS' model of selecting and curating your own program of study, based on a particular idea or area of interest, has been instrumental across all levels of my education. At both Masters and PhD level, I have, essentially, replicated INDS' joint research mentorship model in selecting my own thesis mentors (Georgetown) and dissertation supervisors (Manchester) ...

"At the same time, the interdisciplinary way of thinking that INDS encouraged has allowed me to continue along the trajectory of drawing knowledge from disparate academic traditions and fully being able to integrate them into a single and coherent whole ... INDS' intensive learning atmosphere that puts students in control of their own education has been one of its greatest contributions to my own life (academic and otherwise), alongside the exceptional team of staff that work in the department. The care and compassion that they put into working with each student (which I learned of through my own experience and sharing with fellow students as part of the Council of Majors) is unparalleled at any institution I have been associated with ... Having been to a number of institutions both domestically and internationally, I can confirm that INDS at UMBC is world-class. Its commitment to interdisciplinary undergraduate education is second-to-none."

#### 13(xvii) Eliana NessAiver, May 2013, Medical Imaging

Eliana is a Biomedical Engineering PhD candidate at Johns Hopkins University School of Medicine

"The field of Biomedical Engineering is intrinsically extremely interdisciplinary. My INDS training at UMBC gave me the mental tools to draw on and organize ideas from multiple fields creatively and confidently, when faced with a new engineering problem. I'm also quite glad I had the freedom to choose classes that were directly applicable to my desired graduate degree - the variety of classes I was able to take gave me a better preparation for the variety of tasks I have had to accomplish so far in graduate school."

#### 13(xviii) Yelena Dewald, December 2012, International and Global Studies

In 2017, Yelena graduated from the George Washington University Law School with a full tuition Presidential Merit Scholarship, and the Master of Arts program in International Development Studies at The George Washington University Elliott School of International Affairs. During her studies, she studied abroad in International Human Rights Law at Oxford (UK) and with students at the Groningen University in the Netherlands. Since then, she has been working as an employee of The George Washington University as a Pathways to Practice Legal Fellow with a placement at the Food & Water Watch, a nonprofit organization. She recently sat for the bar exam.

"My original research on the Independent Consultation and Investigation Mechanism at the Inter-American Development Bank was published through The George Washington University International Law Review in its 49th Volume. The article is titled, "When Development Harms Those it Seeks to Help: The Internal Accountability Mechanism at the Inter-American Development Bank," and can be found at <a href="https://www.gwilr.org/?page\_id=2001">https://www.gwilr.org/?page\_id=2001</a>."

"My Interdisciplinary Studies degree shaped my career goals by encouraging me to sincerely reflect on my life ambition and the academic steps necessary to fulfill that ambition. The process

of designing my own degree with help and feedback from multiple sources, including my INDS advisor and disciplinary advisors helped me shape an academic plan that prepared me well for my Masters and Doctoral studies and also helped develop the background necessary to perform well in my chosen career."

#### 13(xix) Lauren Leclercq, December 2012, Creative Arts for Children

Lauren proceeded from INDS to graduate school at UMBC in the Early Childhood Education program. She is now employed as a Teacher in Howard County Public School System.

"I feel as though I bring an interdisciplinary background to my teaching and share that with my coworkers...It has helped me feel more confident with anywhere that I want to work. I can come at many challenges from many different perspectives and backgrounds."

#### 13(xx) Nicholas Destefano, May 2012, Biopsychosocial Health

Nicholas completed his medical degree at Wayne State School of Medicine and is currently in residency for family medicine at Madigan Army Medical Center. He was elected as chief resident for the 2008-2009 academic year and has presented at an international conference. "My INDS education has been instrumental in allowing me to adapt and succeed in diverse ... environments from midtown Detroit to an Army hospital in Tacoma, WA."

#### 13(xxi) Jennifer Mercer, May 2012, Women and Criminal Law

Jennifer received her Juris Doctor degree from the University of Maryland School of Law in May 2015. She worked as a sole practitioner for one year, and is now currently employed as a staff attorney at the Women's Law Center of Maryland. In her role, she provides much-needed legal services to indigent survivors of domestic violence, as well as legal support to lay advocates, social workers, and police officers while serving this population. She serves on several committees to facilitate the provision of domestic violence services in Baltimore County. "The problems my clients face are complex and multifaceted. The legal system (and, by extension, attorneys) can play an important role, but legal solutions alone do not produce recovery from domestic violence. My clients often also need the help of physicians, mental health professionals, and others in order to truly thrive. My interdisciplinary education helps me understand domestic violence as an interdisciplinary problem and helps me communicate effectively with other professionals."

"INDS is a phenomenal program that allows young scholars to pursue their passions in a supportive academic environment. I would gladly do it over again if I had the choice."

### 13(xxii) Jasmine Jones, May 2012, *Human-Computer Interaction in an International Cultural Context*

Jasmine earned her PhD in Information Science from the University of Michigan in 2017. She is now a Postdoctoral Associate at the University of Minnesota-Twin Cities Department of Computer Science.

"I have published 11 peer-reviewed articles for top conferences in the field of human-computer interaction; mentored several undergraduate, masters, and PhD students; was awarded a Willie Hobbs Moore Trailblazer Award for contributing to the advancement of women of color in the academy by the University of Michigan Rackham Graduate School; served as a mentor-teacher

in a international collaborative effort to establish the first Society of Women Engineers chapter on the continent of Africa."

"I wanted to pursue an interdisciplinary research path, and the INDS program offered me the the opportunity to explore many of my interests in a systematic manner ... The interdisciplinary undergraduate education at UMBC was a launchpad into a successful interdisciplinary research career."

#### 13(xxiii) Evan Ponter, May 2012, Music Entrepreneurship

Evan earned a Front-End Web Development "Nanodegree" from Udacity, and has taken a few project management and Java programming courses. He was employed as a system analyst at UMBC Training Centers from 2012 - 2015. After one year as a salesforce administrator at Direct Energy Solar, he is now a CRM Product Manager at Hostelling International USA. "Tve developed a method for report building in Salesforce that streamlines the administrative overhead and provides confidence and clarity for users. I've presented this concept at Salesforce's annual conference called Dreamforce in San Francisco, which hosts over 170,000 attendees. I will also be presenting this concept at Southeast Dreamin', a regional Salesforce conference in Atlanta."

"Employers and colleagues immediately point out that my interdisciplinary degree empowers me to see larger patterns and think holistically when solving problems. This has amazing benefits in the technical work I do, as well as the business-focused process designing that is required to roll out any technical enhancements."

"While my degree was *Music Entrepreneurship* and I don't have a full-time job in a music-related field, I've used my music and management knowledge to help manage the band I play in regularly, and I've been able to use my business and interdisciplinary skills for a full-time job in an IT career. Together, I'm able to make full use of my INDS degree."

#### 14. BUDGET: Use the data from Table 5 to discuss the adequacy of the budget

Since 2011, INDS has fluctuated between small budgetary surpluses and deficits because of staff turnover, input from research grants and other sources of one-time revenue and the time-lag between actual expenditures and allocation of revenue. The largest deficits occurred in the middle of this APR period when the program was midway through replacing a patchwork of adjunct instructors and renewable, one-year contracts for advising with a simplified, stabilized staffing structure. A major step forward was achieved in summer 2017 when the program was given permission to convert funds from both adjunct lines and contractual non-exempt lines into one, stable, core staff position of Program Coordinator. This is proving beneficial to INDS in a multitude of ways, not the least of which is that we expect to balance our budget in Fiscal Year 2018 using a stable staffing structure.

To be clear, the program has worked hard to reconcile the number of students it serves, the courses it teaches, the advising it offers and all other activities into a total expenditure that matches our total income. The program is therefore satisfied with its current budget providing no major changes occur moving forward (such as a significant increase in students). Should such changes occur, the program will have to either scale back its course offerings, increase class sizes or receive a higher budget. A small but significant component of this stabilized budget arrives in the form of encumbered funds, granted upon request at the end of each fiscal year. This amount has been \$35,508 for years 2014 through 2017, and is commented upon in sections 15 (Evaluation) and 16 (Future Directions).

## **15. EVALUATION:** *Provide a summary evaluation of the quality of the program, taking into account all of the factors listed above. Describe the criteria on which the evaluation is based.*

#### **15A Overview of Program Evaluation**

Previous sections of this self-study describe a program that has been adapting, without pause, to challenging shifts in the climate and conditions under which it operates. These include physical relocation, reorganization within UMBC's reporting structure, significant staff turnover and firm redirection away from any central role in interdisciplinary activities at UMBC (details provided in Section 1). These changes had already rendered moot, by the time of Director Freeland's June 2013 appointment, many of the goals and objectives written into the 2011 APR process, and have yielded only recently to a newfound sense of stability. For example, one day prior to the start of Academic Year 2017-2018, two of the four INDS core staff (McAlpine and Sauter) were each heading up a search committee to hire the other two members of core staff (Brown and Cudzilo). These searches reflected, respectively, the culmination of a three year effort to stabilize a Program Coordinator position and urgent replacement for the program's only Administrative Assistant. By the end of that Fall semester, INDS had hosted at UMBC the 39th annual conference of the international Association of Interdisciplinary Studies, aquitting itself successfully from a commitment made four years prior, while continuing to operate smoothly on all fronts (graduating, for example, its fourth student to successfully enter medical school within the past twelve months).

By focusing on the purpose for which INDS was originally created, the program staff have not only weathered all changes but navigated them to emerge with a more efficient and integrated program. The most salient statistics supporting this claim are that student enrollment in the program has declined, as have the numbers of degree proposals approved, but the number of graduates has remained constant, and the success of graduating seniors remains noteworthy (details provided in Section 2A). This current picture of INDS activity fits the mission of Undergraduate Academic Affairs, which focuses on retention, timely graduation, and student success.

By working to reconcile the number of students it serves, the courses it teaches, the advising it offers, the staffing it provides and all other activities into a total expenditure that matches our static budget, INDS has arrived at a point of stability beyond that characterizing the past six years. It has done so with an integrated curriculum, and a framework for program-level assessment that is capable of now producing far more detailed insights into its strengths and weaknesses. The program's self study perceives the period covered by this APR as one of successful adaptation to challenging circumstances.

Weak spots and questions remain. Several courses (INDS 232, INDS 400, INDS 410 and INDS 430) are yet to be incorporated into the new, integrated curriculum. Of these, the required course INDS 430 is arguably most pressing. More broadly, the expanded curriculum prepares students well for capstone research, but only if they discover INDS more than 4 semesters prior to their intended date for graduation. This timing is highly relevant to the large population of students who transfer to UMBC with two years of higher education from community college.

In another direction, the program experiences ever-creeping difficulty securing appropriate faculty mentors for all students in a timely fashion. It is further challenged to ensure

even levels of faculty commitment across different students and different degrees. Problems rarely seem to occur when the second degree mentor is a practicing professional drawn from beyond UMBC's faculty. This latter group of mentors typically regard it as a pleasure and a privilege to offer *pro bono* expertise to young minds researching/preparing for their line of professional activity. A similar attitude certainly holds for a substantial fraction of excellent faculty mentors, but others struggle to maintain even, reliable follow-through on commitments made to students at the time a degree plan is submitted to the ISC. This is understandable given the lack of a formal incentive system in a university where resources are usually scarce and workload high. The situation is further complicated by the fact that students' specific academic concentrations often evolve considerably between preparation of a degree plan (when faculty mentors are recruited) and the time at which mentors' help is most needed (as the terminal capstone research project approaches). INDS has long pondered whether a better and more efficient system of matching mentors to students might benefit all parties. On an altogether different front, and potentially easy to fix, the program sorely misses the conference room that it had prior to physical relocation of offices in 2014.

Three areas offer context with which to think about these problems: (1) the shifting nature of program specialization, as reflected in the subject matter taught in our core curriculum, including new research (and new research partners) who are interested in working with INDS to explore how higher education can best adapt to the rapid changes in society; (2) the extent to which the program emerging from this period of self-study is poised to serve UMBC by teaching students who do not declare the INDS major. major (3) Potential to expand the appeal of the IINDS degree to students for whom professional school (medical, optometry, law school etc.) is their ultimate goal and the integration of admission requirements with their multidisciplinary interests can assist them in building a competitive profile for their chosen program. Each of these topics is worthy of detailed discussion in order to set the stage for *Section 16: Future Directions*.

#### 15B An evaluation of developments in program specialization

From a pedagogical perspective, the INDS program's core texts have traditionally been those promoted by the Association of Interdisciplinary Studies (AIS) as the Scholarship of Interdisciplinary Teaching and Learning (<u>SOITL</u>). In this, we have focused on textbooks from the authoritative canon published by Allen Repko (later, Repko and Szostak). Both individuals are past board members and/or presidents of the AIS.

Authority is clear from the statements with which these texts typically begin (e.g. "Interdisciplinary studies refers to diverse and growing academic field with its own literature, curricula, community of scholars, undergraduate majors, and graduate programs. Importantly it uses a research process designed to produce new knowledge..." Repko and Szostak (2017), p. 3). Both the advantage and disadvantage of such a text is to delineate clearly the territory within which a program like INDS should specialize, and how it should set about doing so. To explain by example, the strategies of disciplinary integration which define the appropriate "research process" were developed by William Newell from insights within the field of cognitive psychology (e.g. Repko, 2007). These strategies concern themselves primarily with the intellectual (epistemological) challenges of reconciling insights from different branches of the tree by which human knowledge has come to be organized. Authors from beyond the AIS community have often perceived a far broader challenge. Krishnan (2009) describes epistemology as only one of five, equally important dimensions that combine to explain what are academic disciplines. Other dimensions interpret academic disciplines as society's tools to train a specialized workforce, as cultures and tribes, as products of history and as products of management strategies to organize an education "market" in response to demand.

Assessment of our students' experiences aligns with the broader view expressed by Krishnan. For example, the challenges encountered by students in developing degree plans and capstone research projects frequently reflect the history by which subject matter has ended up within different corners of the university, including the combination of administrative decisions and societal demands that have created this history. No clear epistemological reason explains why, at UMBC, ecology courses and the Interdisciplinary Science Program are offered from within the College of Arts, Humanities and Social Sciences rather than the College of Natural and Mathematical Sciences. Understanding how and why UMBC organizes knowledge not only enables students to find and assemble appropriate coursework but equips them to think about the cultures and administrative hurdles they will have to navigate in order to access disciplinary insights before any questions of epistemological synthesis become relevant.

First steps in broadening the literature taught by our introductory course, INDS 330. retained the canonical works of AIS, but emphasized their views as *one component* of the scholarship that can guide students to understand academic disciplines well enough to form a coherent degree. Other areas of scholarship were introduced to speak to other dimensions of the challenge. Examples include concepts of *Systems Thinking* (e.g. Checkland, 1981 and Meadows, 1999) that come from areas of information management usually taught within the College of Engineering and Information Technology and *Activity Theory* (Kain and Wardle, 2005) that comes from the English department. Further expansions are starting to include histories of higher education in the United States that help students understand what UMBC offers and why. Even foundational concepts of rhetoric such as Aristotle's *pathos, ethos* and *logos* which predate western concepts of academic disciplines have been inserted because they work surprisingly well as tools for developing writing skills and dissecting ideas across disciplinary boundaries.

Certainly Repko's definition quoted above refers to a *growing* field which leaves room for exploration of new ideas. The question is whether interdisciplinary activity is helped or hindered by an expectation of assimilating into *a* literature, *a* community of scholars, *a* research methodology - even *a* professional organization that defines where these boundaries lie? At UMBC, INDS notes that none of the new, interdisciplinary departments, programs or buildings look to AIS for recognition or approval. The same holds true for representatives of major funding agencies and international research organizations which INDS brought to UMBC for the 2017 AIS conference. All seem content to let the AIS whether or not to assimilate their diverse and ongoing activities into explanations of what constitutes interdisciplinarity.

One consequence of introducing multiple sources from different disciplinary perspectives into coursework, far beyond the ideas which AIS leaders have distilled into a convenient textbook, is that program instructors find themselves explaining that *this* is what scholarly activity looks like. In synthesizing insights that range from Aristotle's concept of ethos to Information Systems' concept of a literature matrix, students must reconcile very different ways of seeing and describing the world. The new curriculum aligns with UMBC's functional competencies for critical thinking and information literacy, and our students receive earlier introduction to the process by which they will assemble capstone research projects.

With hindsight it becomes clear that a textbook which uses a single, authoritative voice to define the scope and mechanics of proper interdisciplinary research places students into the role

of apprentices whose job is to master such knowledge. The emerging curriculum recasts students as managers of diverse information. Each student's goal becomes that of making higher education work for them. It is no coincidence that the first reading students now encounter within INDS 330, is "Claiming an education" (Rich, 1977). All of this sounds much more like the work of a program created to "*Afford highly motivated, intellectually mature students the opportunity to construct their own academic programs, with the hope that these students might better profit from the experience than from the traditional major programs..."* Section 16: Future Directions follows up this evaluation with a statement of vision for potential future developments.

#### 15C Evaluation of the program's relevance to UMBC's mission

The INDS curriculum has broadened to incorporate new ideas in order to better reflect, within rapidly changing world, the purpose for which this program was originally created. Within the context of a university that is itself rapidly changing, a similar evaluation must ask whether INDS is serving the campus community effectively?

At present, program activity focuses upon the small number of majors who identify INDS as the way to best achieve their post-graduation goals. At the time of writing this number is approximately 1% of UMBC's total undergraduate population. The open question is whether INDS could better serve UMBC by evolving its relationship to the remaining 99% of non-majors and/or expanding the type of students who choose INDS? Of particular interest is a current ambiguity at UMBC for students who are able to satisfy their goals by declaring the INDS major or instead by adding a certificate, minor or second major to their undergraduate career. Current program publicity materials state that "*Either option can be the best choice for a specific student*. *The difference lies in how the student wishes to go about identifying and exploring the connections between the different disciplines*. *The INDS curriculum provides time, guidance (and academic credit) for identifying and exploring connections between different areas of specialized scholarship. Choosing a double major (or major and minor) leaves the student to do this using their own resources.*" In other words, INDS experience can help students add value to their education by integrating ideas between different disciplines.

INDS presently welcomes non-majors into three courses of the core curriculum: INDS 330, INDS 335 and INDS 430. INDS 430 is presently reduced to a single section each academic year, and awaits integration into the emerging curriculum. INDS 330, as described in the preceding section, has evolved in content to help students take control of their undergraduate careers. Non-INDS majors seem to be responding well to this new emphasis, not least by recognizing with greater clarity whether INDS is the best path for them, but also by leaving the class with a stronger sense of how they may navigate UMBC organizational structure in order to achieve their postgraduation goals. INDS 335 picks up where INDS 330 leaves off by guiding students through a rigorous process of creating detailed degree plans based on careful research linking their background and motivation to intended outcomes. At present, INDS 335 serves non-majors mostly by virtue of guiding students who initially intend the INDS major to discover that they are in fact better served by one or more existing degree programs. In its first three years of operation, the course has carefully redirected between  $\frac{1}{3}$  and  $\frac{2}{3}$  of its students in any given semester. INDS welcomes this "service" role to the UMBC campus community. It is an intentionally constructive interpretation of the gateway course, one consistent with the aims and values of Undergraduate Academic Affairs by increasing student success rather than simply blocking student progress in a given direction.

#### **16. FUTURE DIRECTIONS:**

\* Discuss the vision and future goals for the program and the strategies being developed or implemented to achieve these. If there are regional or national aspirational peers for the program, identify these and provide the rationale for their selection.

\* Provide degree projections, and discuss resource needs, to support new faculty hires, new courses, new facilities, new or expanded research and curricular thrusts. Prioritize the list of new resources needed in terms of the greatest benefit for the program. Discuss the first priority in detail. Identify and discuss potential new sources of revenue for the program.

### \* In addition to the generic items included above, there may be specific questions, issues, or foci that the chair or dean may want addressed in the self-study.

Program operations have developed considerably over the past six years in order to continue serving, within an evolving campus environment, the purpose for which INDS was created. In particular, interdisciplinarity has proliferated at UMBC. Recent additions include new, interdisciplinary degree programs and departments, the appointment of a Special Assistant to the Provost for Interdisciplinary Activities and even the construction of an Interdisciplinary Life Sciences building at the center of campus. This growth explains why a program renamed "*Interdisciplinary Studies*" in 1979 so as to align with specific, emerging ideas for the integration of knowledge (Thomas Benson, pers. comm.) now seeks a name change to "*Individualized Study*" in order to clarify its role within a complex ecosystem of interdisciplinary activity.

Timing of the sensitive issue of name change has awaited the successful conclusion of a three year commitment to host the international Association of Interdisciplinary Studies (AIS) conference at UMBC and the arrival of a new dean to which INDS reports. Renaming the program is best understood, however, as the culmination of a deeper and more gradual process of clarifying program identity. Over the past four years INDS has started to balance its involvement with the Association of Interdisciplinary Studies (AIS) with growing connections to the younger Individualized Majors' Program (IMP) network (https://impnetwork.wordpress.com/). Refocusing the professional society to which the program looks for inspiration reflects the interplay of three interrelated themes that dominate the vision and future goals for the program: (1) the nature of an individualized major (2) developing program specialization and (3) developing the program's relevance to UMBC's mission. These conceptual topics are discussed below in sections 16A(i)-16A(iii) respectively in order to inform a final discussion of degree projections and resource needs in Section 16B.

#### 16A(i) What is an individualized major?

An individualized degree program at UMBC navigates the territory between two extremes: (1) a program aimed at facilitating degree completion and (2) a program targeted to a small fraction of academically elite students.

One simple, but wholly unsatisfactory view of an individualized major is that it recognizes any assemblage of coursework which meets UMBC's institutional requirements for graduation. Certainly, degree-completion programs like this have been created at many institutions, but always for the purpose of enhancing institutional graduation rates rather than any claim to educational or intellectual validity. Indeed the way in which such programs tend to change over time supports the idea that something more meaningful is not only desirable and possible but perhaps inevitable. The University of Oklahoma, for example, offers a

"Multidisciplinary Studies" (MDT) degree program within the College of Arts and Sciences. According to a recent IMP conference presentation by those responsible for administering the program, it was instituted in 2006 at the direct request of the university president to provide a pathway to graduation for a large number of students who had come close to meeting general degree requirements but failed to complete any traditional major. Between 2007 and 2010, the program grew 400% and graduated almost 1,200 students. Having cleared a one-time backlog of "nearly graduated" students, the program began shrinking to a more sustainable role with a focus shifted to preventing students from reaching this situation by guiding students to generate meaningful degrees in the first place. This resulted in the introduction of a capstone course and an application process (academic year 2011-12); introduction of a faculty oversight committee (2012-2013) and, at the time of presentation (2014) ongoing refinements to these foundations of rigor. In other words, this degree completion program evolved into something that more closely resembles INDS at UMBC. INDS, of course, was not created simply to enhance graduation rates, and it has never perceived any pressure to go this route (as one might hope from an institution that has developed its identity as an Honors University). Beyond that, however, the Oklahoma example illustrates a subtler point, namely why INDS does not perceive that "quickest path to graduation" is helpful as an overarching guide. Even Maryland state legislation aimed to make higher education more efficient (SB740) mandates only that students are provided consistent, clear guidance about their timeline and milestones to graduation. INDS perceives clarity of progress as fully aligned with a program which challenges students to seize control of their undergraduate education, even if this extends time to graduation for the sake of creating a meaningful degree.

At the other extreme from degree completion, some institutions offer individualized degree programs as an option limited to elite students. Georgetown University, for example, offers an interdisciplinary studies major ("IDST") to a restricted number of high achieving students (cumulative G.P.A. of 3.5 or higher) who wish to demonstrate that they can go above and beyond the demands of a traditional major. Other institutions offer such programs as an especially demanding option within their Honors college. While INDS has always welcomed academically gifted students, it has never sought to limit or steer enrollment in this direction. Indeed, deep discussions among INDS staff and the faculty and staff across campus who work with this program have identified two arguments against exploring such a possibility. One is that UMBC already offers many, different "pockets of excellence" to academically gifted students (diverse scholar programs, the Honors College, etc.) Fewer opportunities exist at UMBC to help students of median academic ability to optimize their undergraduate career for life after graduation. A focus on this latter group aligns with both the mission of UAA and seems likely to speak to statistics of UMBC retention and graduation.

The second reason to avoid the concept of an elite academic program is indirect assessment indicating that the skillset students need to seize an "opportunity to construct their own academic programs, with the hope that these students might better profit from the experience than from the traditional major programs" seems to be often (though by no means always) different from that which causes students to excel in traditional academic metrics of success. Put bluntly, high achieving students often seem to struggle when asked to become collaborators in creating their own frameworks for study, thriving instead where such frameworks are presented to them as a fixed challenge. In this sense, a textbook that defines the appropriate scope and correct processes of interdisciplinary activity provides a misleading sense of structure where something altogether different is required.

An individualized degree program at UMBC therefore navigates the territory between two extremes: simple degree completion and academic elitism. The program avoids any pull towards simple degree completion by focussing on the integration of learning experiences into a single, coherent program of study that prepares the student for their post-graduation goals. The program avoids any pull towards academic elitism by recognizing that theories of integration (interdisciplinarity) are a tool, not a goal (a "second major"), for our students.

#### 16A(ii) Expanding the program's activities to incorporate research

Developments in program specialization have opened up new possibilities for INDS to broaden activity from an exclusive focus on teaching and advising to also incorporate research. Once students display agency, program staff can work with them (rather than simply instructing them) in exploring how to integrate elements drawn from more than one academic program. Our teaching and their learning fuse into collaborative research.

Seen in this light, it becomes logical that changes in the program have begun to connect us with individuals and organizations actively engaged in researching new ideas for facilitating interdisciplinary activity. These include BrainTrust at the University of Copenhagen (http://braintrustinfo.dk/braintrust-info\_en.html) and Know Innovation (http://knowinnovation.com), affiliated with SUNY Buffalo. Ideas and tools from both groups are now starting to appear in INDS coursework (see Section 5). As we pursue these exploratory research collaborations, an open question is the extent to which INDS staff can or should be involved in knowledge generation as opposed to knowledge transmission? With the notable exception of Assistant Director McAlpine's (2014) work on concept mapping, INDS has not ventured into the world of scholarly publication during the period covered by this APR; we are actively discussing the extent to which this might usefully change.

#### 16A(iii) Developing the program's relevance to UMBC's mission

The relocation of INDS in 2013 to report as part of the Division of Undergraduate Academic emphasizes a program focus on student success. As a degree-granting program, INDS interprets student success as the case-specific interplay of student retention, timely graduation and preparation to compete successfully for intended post-graduate goals.

Three, inter-related factors are, for example, causing INDS to pilot a new structure for the process of degree plan review as the program moves into Spring 2018. First INDS has struggled to secure a steady flow of proposals for each of the traditional four, monthly ISC meetings each semester. Proposals intended for early meetings fall victim to procrastination and unforeseen complications so that proposal numbers tend to increase as the semester proceeds. Uneven flow of proposals uses ISC members' time inefficiently and leads to unequal discussion time for proposals submitted early versus late in the semester. Second, students can fail to "reach the finish line" on an intention to submit degree plans as this extra-curricular commitment competes unsuccessfully with traditional demands of curricular activities (exams, assignments etc.). Third we have noticed a growing trend, particularly with the current incarnation of the ISC, of voting to require resubmission of proposals a second time in order to see revisions the committee members' perceptions of useful improvements. This can result in adding a semester to students' graduation timeline. Together, these factors lead students to drop out of the major for reasons

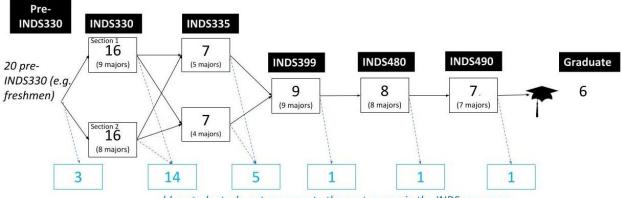
that have little to do with their fit to INDS. In response, INDS has incorporated into INDS 335 formal course requirements that each student (a) submit "work in progress" degree plans to the ISC as a midterm assignment, so as to collect early feedback and (b) make formal submission of a degree plan, whether to INDS or to an alternative major, in order to receive a passing grade.

Refinements of INDS 330 and INDS 335 are therefore producing courses that are increasingly helpful to students whether or not they end up pursuing the INDS major. A deep and open question is therefore whether INDS can and should develop further its potential to serve non-majors. As Figure 2.1 (page 11) shows, a large fraction of these students are enrolled in relatively few, over-subscribed degree programs where it is most challenging for advisors and instructors to provide individualized attention. As noted in previous sections of this self-study, significant program resources are devoted to developing capstone research projects once a degree plan has been approved by the ISC. Furthermore, a significant challenge for the program is locating appropriate faculty mentors for each student. Appropriate service to non-majors could therefore be far more effective than scaling up the INDS program if it were to produce a benefit to UMBC consistent with the mission of INDS and the aims of UAA.

## 16B Degree projections and resource needs: *Prioritize the list of new resources needed in terms of the greatest benefit for the program. Discuss the first priority in detail. Identify and discuss potential new sources of revenue for the program.*

#### **16B(i)** Degree projections

For a program like INDS it is especially difficult to predict future student demand. As described in earlier sections, INDS has instead worked steadily to arrive at a point of stability that aligns the number of students it serves, the courses it teaches, the advising it offers, the staffing it provides and all other activities into a total expenditure that matches our current budget. We therefore offer instead a detailed sketch of the program that can exist, sustainably, with current resources. This projection is shown below in Figure 16.1 and would yield a program of approximately 70 majors and 20 non-majors at any given time.



blue students do not progress to the next course in the INDS sequence

**Figure 16.1: Program enrollment projections for INDS:** A sketch of the steady-state "flow model" describing the number of students and class offerings using current staffing and budget.

#### 16B(ii) Resource needs for new faculty hires and new courses, new facilities

The INDS program seeks no new faculty hires or new courses so long as the program stays close (+/- 10%) to the projection shown in Figure 16.1, and so long as the yearly contribution of encumbered funds (which predates the current Director's appointment), continues unchanged. Indeed, the curriculum, staffing, student numbers and other aspects of program activity have been tailored to meet the current budget. If enrollments were to rise significantly, then a budget increase would be required to maintain the same level of service to students. The most labor-efficient (and therefore cost-effective) way to scale up program activity would be to increase service to non-INDS majors. Possible growth in enrollment of pre -professional majors would necessitate budget growth. In the absence of any significant changes to enrollment, new resources that would most benefit the program are (listed in order of descending priority):

- (1) The program would benefit tremendously from regaining a conference room. If it is impossible to convert FA002, then the possibility of a further physical relocation of the program could potentially speak to secondary concerns about facilities (storage space, contiguous office space and/or a space where students can interact outside of formal activities)
- (2) An appropriate point of contact in the Office of Institutional Advancement could help the program to leverage strong, positive sentiment from alumni into tangible benefits for UMBC (not least the potential for the program to find and recruit degree mentors from its own alumni as they ascend career ladders in many careers and professions).
- (3) A formalized relationship with IRADS (e.g. a recognized point of contact) could help the program to explore how best to serve UMBC based on important data about university demographics.

A broader, open question is whether the program would benefit from recognizing the qualifications and teaching skills of some of its staff by seeking reclassification to lecturer status.

#### 16B(iii) New or expanded research and curricular thrusts

As described in multiple, preceding sections of this self-study, INDS is currently involved in ongoing revision of its curriculum and specialization. All such activity has been designed deliberately to be revenue neutral, with two caveats.

First, exploratory collaborations between INDS and both KnowInnovation and Braintrust could generate new revenue for the program. Specifically, after an initial period of exploring areas of mutual benefit, both parties in each collaboration are starting to look closely at opportunities for significant research funding. At present, the sense is that efforts might best be targeted to demographics of particular interest to both funders of educational innovation and to UMBC whether general (e.g. transfer students, returning students) or specific (e.g. under-represented minorities in Astrobiology). Once again, it would be most cost-effective to target service to non-INDS majors, but much depends on the nature of funding opportunities identified and the popularity of INDS in the future as a viable pre-professional major.

The only new resources that would be required to significantly facilitate such development would would be a dedicated point of contact, along with any other form of appropriate support, from UMBC's Office of Sponsored Programs. Beyond that, it remains entirely at the discretion of UMBC's leadership, including deans, department chairs and program directors, whether and how to use INDS for mutual benefit. The program notes simply that creative use of programs analogous to INDS in other institutions is common.

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	Lisi	s all courses offered by Interd	disciplinary Studie	es from Fall 2010 t	to Fall 2017	
		Source: Il	NDS Departmenta	al Data		
Semester &	Course Designation &	Title	# of Credits	# of Students	Names of Faculty Presenting	
Fall 2010	INDS 330, section 1	Ways of Knowing	3	14	Steven McAlpine, INDS	
Fall 2010	INDS 330, section 1	Ways of Knowing, Honors	3	3	Steven McAlpine, INDS	
Fall 2010	INDS 330, section 2	Ways of Knowing	3	11	Lisa Vetter, INDS Adjunct	
-all 2010	INDS 330, section 2	Ways of Knowing, Honors	3	2	Lisa Vetter, INDS Adjunct	
-all 2010	INDS 400	INDS Independent Study	1-4	1		
-all 2010	INDS 400H	INDS Independent Study,	1-4	1		
-all 2010	INDS 410	INDS Internship	1-4	9		
Fall 2010	INDS 430	The Business of Medicine	3	13	David Tarantino	
Fall 2010	INDS 430 Honors	The Business of Medicine,	3	2	David Tarantino	
Fall 2010	INDS 480, section 1	Capstone Project Seminar	1	14	James Scott, INDS Adjunct	
Fall 2010	INDS 480, section 2	Capstone Project Seminar	1	10	Patricia La Noue, INDS	
Fall 2010	INDS 490	Capstone Project	3	7		
Fall 2010	INDS 490 Honors	Capstone Project, Honors	4	2		
Spring 2011	INDS 330, section 1	Ways of Knowing	3	12	Steven McAlpine, INDS	
Spring 2011	INDS 330, section 1	Ways of Knowing, Honors	3	3	Steven McAlpine, INDS	
Spring 2011	INDS 330, section 2	Ways of Knowing	3	14	Lisa Vetter, INDS Adjunct	
Spring 2011	INDS 330, section 2	Ways of Knowing, Honors	3	3	Lisa Vetter, INDS Adjunct	
Spring 2011	INDS 400	INDS Independent Study	1-4	2		
Spring 2011	INDS 410	INDS Internship	1-4	10		
Spring 2011	INDS 430	Sustainable Design: the	3	8	Patricia La Noue, INDS	
Spring 2011	INDS 430 Honors	Sustainable Design: the	3	1	Patricia La Noue, INDS	
Spring 2011	INDS 480	Capstone Project Seminar	1	8	Ozlen Luznar	
Spring 2011	INDS 490	Capstone Project	3	19		
Spring 2011	INDS 490 Honors	Capstone Project, Honors				
0011			4	6		
Summer 2011 Fall 2011	INDS 410 INDS 330, section 1	INDS Internship Ways of Knowing	1-4 3	2 12	Steven McAlpine, INDS	
Fall 2011	INDS 330, section 1	Ways of Knowing, Honors	3	12	Steven McAlpine, INDS	
	Honors	Trayo or raiowing, rionors	3	4		
-all 2011	INDS 330, section 2	Ways of Knowing	3	14	Patricia La Noue, INDS	
-all 2011	INDS 330, section 2	Ways of Knowing, Honors			Patricia La Noue, INDS	
	Honors	INDO Indonor dans Oturiu	3	2	<u> </u>	
-all 2011 -all 2011	INDS 400 INDS 410	INDS Independent Study INDS Internship	1-4 1-4	3 9	<u>↓                                    </u>	
Fall 2011	INDS 410 INDS 430	The Business of Medicine	1-4	9	David Tarantino	
		The Dusiness of Medicifie	3	14		

Fall 2011	INDS 430H Honors	The Business of Medicine	3	2	David Tarantino	
Fall 2011	INDS 480, section 1	Capstone Project Seminar	1	9	Steven McAlpine, INDS	
Fall 2011	INDS 480, section 2	Capstone Project Seminar	1	6	Patricia La Noue, INDS	
Fall 2011	INDS 490	Capstone Project	3	2		
Fall 2011	INDS 490H, Honors	Capstone Project Honors	4	2		
Spring 2012	INDS 330, section 1	Ways of Knowing	3	10	Steven McAlpine, INDS	
Spring 2012	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
1 0	Honors	, 0,	3	4	1 7	
Spring 2012	INDS 330, section 2	Ways of Knowing	3	13	James Scott	
Spring 2012	INDS 330, section 2	Ways of Knowing, Honors			James Scott	
1 0	Honors	, 0,	3	3		
Spring 2012	INDS 400	INDS Independent Study	1-4	2		
Spring 2012	INDS 410	INDS Internship	1-4	4		
Spring 2012	INDS 430	Food: An Interdisciplinary Exploration			Jill Wrigley	
			3	14		
Spring 2012	INDS 430H	Food: An Interdisciplinary Exploration, Honors			Jill Wrigley	
			3	3		
Spring 2012	INDS 480				Patricia La Noue, INDS	
		Capstone Project Seminar	1	12		
Spring 2012	INDS 490	Capstone Project	3	10		
Spring 2012	INDS 490 Honors	Capstone Project, Honors	4	8		
Fall 2012	INDS 330, section 1	Ways of Knowing	3	11	Steven McAlpine, INDS	
Fall 2012	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	5		
Fall 2012	INDS 330, section 2	Ways of Knowing	3	13	James Thomas	
Fall 2012	INDS 330, section 2	Ways of Knowing, Honors			James Thomas	
	Honors		3	3		
Fall 2012	INDS 400	INDS Independent Study	1-4	2		
Fall 2012	INDS 410	INDS Internship	1-4	9		
Fall 2012	INDS 430	Integrative Medicine	3	11	Natasha Ryan	
Fall 2012	INDS 430H	Integrative Medicine,			Natasha Ryan	
		Honors	3	4		
Fall 2012	INDS 480				Eric Montgomery	
		Capstone Project Seminar	1	11		
Fall 2012	INDS 480				Patricia La Noue	
		Capstone Project Seminar	1	11		
Fall 2012	INDS 490	Capstone Project	3	8		
Spring 2013	INDS 330, section 1	Ways of Knowing	3	11	Steven McAlpine, INDS	
Spring 2013	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	5		

Spring 2013	INDS 330, section 2	Ways of Knowing	3	13	James Thomas	
Spring 2013	INDS 330, section 2	Ways of Knowing, Honors			James Thomas	
-1- 5	Honors		3	4		
Spring 2013	INDS 400	INDS Independent Study	1-4	2		
Spring 2013	INDS 410	INDS Internship	1-4	7		
Spring 2013	INDS 430	Food: An Interdisciplinary Exploration		-	Jill Wrigley	
-			3	8		
Spring 2013	INDS 430H	Food: An Interdisciplinary Exploration, Honors			Jill Wrigley	
			3	5		
Spring 2013	INDS 480				Eric Montgomery	First semester INDS 480 is 2
		Capstone Project Seminar	2	9		credits
Spring 2013	INDS 490	Capstone Project	3	13		
Spring 2013	INDS 490 Honors	Capstone Project, Honors	4	6		
Summer 2013	INDS 490	Capstone Project	3	1		
Fall 2013	INDS 330, section 1	Ways of Knowing	3	12	Steven McAlpine, INDS	
Fall 2013	INDS 330, section 1 Honors	Ways of Knowing, Honors	3	4	Steven McAlpine, INDS	
Fall 2013	INDS 330, section 2	Ways of Knowing	3	12	James Thomas	
Fall 2013	INDS 330, section 2 Honors	Ways of Knowing, Honors	3	5	James Thomas	
Fall 2013	INDS 400	INDS Independent Study	1-4	2		
Fall 2013	INDS 400	Placeholder of INDS 335	1	8	Eric Brown	
Fall 2013	INDS 400	INDS Internship	1-4	6		
Fall 2013	INDS 430	Integrative Medicine	3	8	Natasha Ryan	
Fall 2013	INDS 430H	Integrative Medicine, Honors	3	3	Natasha Ryan	
Fall 2013	INDS 480	Capstone Project Seminar	1	7	Eric Montgomery	
Fall 2013	INDS 480	Capstone Project Seminar	1	4	Stephen Freeland	
Fall 2013	INDS 490	Capstone Project	3	7		
Fall 2013	INDS 490H, Honors	Capstone Project Honors	4	3		
Spring 2014	INDS 330, section 1	Ways of Knowing	3	13	James Thomas	
Spring 2014	INDS 330, section 1 Honors	Ways of Knowing, Honors	3	3	James Thomas	
Spring 2014	INDS 330, section 2	Ways of Knowing	3	15	Steven McAlpine, INDS	
Spring 2014	INDS 330, section 2 Honors	Ways of Knowing, Honors	3	1	Steven McAlpine, INDS	
Spring 2014	INDS 400	INDS Independent Study	1-4	4		
Spring 2014	INDS 400	Placeholder of INDS 335	1	5	Eric Brown	
Spring 2014	INDS 410	INDS Internship	1-4	6		

Spring 2014	INDS 430, section 1	Food: An Interdisciplinary Exploration			Jill Wrigley	
			3	14		
Spring 2014	INDS 430H, section 1 Honors	Food: An Interdisciplinary Exploration, Honors	2	6	Jill Wrigley	
Spring 2014	INDS 430, section 2	Astrobiology	3	6	Stephen Freeland	
Spring 2014 Spring 2014	INDS 430, section 2 INDS 430H, section 2	Astrobiology	3	9	Stephen Freeland	
Spring 2014	Honors	Astrobiology	3	5	Stephen Freeland	
Spring 2014	INDS 480	Astrobiology	5	5	Eric Montgomery	First semester
Spring 2014	11103 400				End Monigomery	INDS 480 is 2
		Capstone Project Seminar	2	6		credits
Spring 2014	INDS 490	Capstone Project	3	5		
Spring 2014	INDS 490 Honors	Capstone Project, Honors	4	8		
Fall 2014	INDS 232	Intro to Food System			Jill Wrigley	
		Studies	3	18	5.	
Fall 2014	INDS 330, section 1	Ways of Knowing	3	16	Steven McAlpine, INDS	
Fall 2014	INDS 330H, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	4		
Fall 2014	INDS 330, section 2	Ways of Knowing	3	17	James Thomas	
Fall 2014	INDS 330H, section 2	Ways of Knowing, Honors			James Thomas	
	Honors		3	3		
Fall 2014	INDS 335	Degree Plan Writing			Eric Brown	
		Seminar	1	16		
Fall 2014	INDS 399	Guided Reading in INDS	1	3	Samirah Hassan	
Fall 2014	INDS 400	INDS Independent Study	1-4	10		
Fall 2014	INDS 410	INDS Internship	1-4	9		
Fall 2014	INDS 430, section 1	Case Studies in Public			Fizza Gulamali-Majid	
		Health	3	15		
Fall 2014	INDS 430H, section 1	Case Studies in Public			Fizza Gulamali-Majid	
	Honors	Health	3	3		
Fall 2014	INDS 430, section 2	Science and Spirituality	3	11	Stephen Freeland	
Fall 2014	INDS 430H, section 2	Science and Spirituality			Stephen Freeland	
	Honors		3	3		
Fall 2014	INDS 480, section 1	Capstone Project Seminar	2	12	Eric Montgomery	
Fall 2014	INDS 490	Capstone Project	3	3	1	
Fall 2014	INDS 490 Honors	Capstone Project, Honors		-		
			4	1		
Spring 2015	INDS 330, section 1	Ways of Knowing	3	20	Steven McAlpine, INDS	
Spring 2015	INDS 330, section 1 Honors	Ways of Knowing, Honors	3	6	Steven McAlpine, INDS	
Spring 2015	INDS 330, section 2	Ways of Knowing	3	16	James Thomas	
Spring 2015 Spring 2015	INDS 330, section 2	Ways of Knowing, Honors	3	10	James Thomas	
Spring 2015	Honors	ways or knowing, Honors	3	3	James momas	

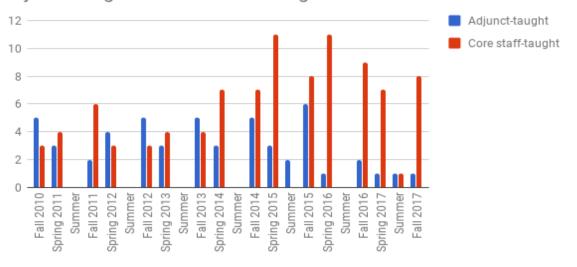
Spring 2015	INDS 335	Degree Plan Writing			Eric Brown	
oping 2015		Seminar	1	15 (+3?)	Ene brown	
Spring 2015	INDS 399	Guided Reading in INDS	1	5	Samirah Hassan	
Spring 2015	INDS 400	INDS Independent Study	1-4	1	Carment Hassari	
Spring 2015	INDS 410	INDS Internship	1-4	7		
Spring 2015	INDS 430, section 1	Creating Food System		,	Jill Wrigley	
opinig 2010		Justice	3	15	om trigioy	
Spring 2015	INDS 430H, section 1	Creating Food System	-		Jill Wrigley	
-13	Honors	Justice	3	2		
Spring 2015	INDS 430, section 2	Astrobiology	3	10	Stephen Freeland	
Spring 2015	INDS 430H, section 2	Astrobiology			Stephen Freeland	
1 0	Honors	33	3	1		
Spring 2015	INDS 430, section 3	The Anthropocene	3	6	Eric Brown	
Spring 2015	INDS 430H, section 3	The Anthropocene			Eric Brown	
	Honors		3	1		
Spring 2015	INDS 430, section 4	Kinetic Sculpture Project	3	12	Steven McAlpine	
Spring 2015	INDS 480, section 1	Capstone Project Seminar			Eric Montgomery	
			2	4		
Spring 2015	INDS 490	Capstone Project	3	10		
Spring 2015	INDS 490 Honors	Capstone Project, Honors				
			4	3		
Summer 2015	INDS 330	Ways of Knowing	3	7	James Thomas	
Summer 2015	INDS 330H	Ways of Knowing, Honors			James Thomas	
			3	1		
Summer 2015	INDS 400	INDS Independent Study	1-4	2		
Summer 2015	INDS 410	INDS Internship	1-4	1		
Fall 2015	INDS 232	Intro to Food System			Jill Wrigley	
		Studies	3	15		
Fall 2015	INDS 330, section 1	Ways of Knowing	3	14	Steven McAlpine, INDS	
Fall 2015	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	2		
Fall 2015	INDS 330, section 2	Ways of Knowing	3	11	James Thomas	
Fall 2015	INDS 330, section 2	Ways of Knowing, Honors			James Thomas	
	Honors		3	5		
Fall 2015	INDS 335	Degree Plan Writing			Eric Brown	
		Seminar	1	11		
Fall 2015	INDS 399	Guided Reading in INDS	1	8	Samirah Hassan	
Fall 2015	INDS 400	INDS Independent Study	1-4	5		
Fall 2015	INDS 410	INDS Internship	1-4	11		
Fall 2015	INDS 430, section 1	Science and Spirituality	3	5	Stephen Freeland	
Fall 2015	INDS 430H, section 1	Science and Spirituality	0	_	Stephen Freeland	
F-11 004 5	Honors		3	2		
Fall 2015	INDS 430, section 2	Case Studies in Public	0		Fizza Gulamali-Majid	
	INDO 40011 constitute 0	Health	3	8	Firme Outemali Malia	
Fall 2015	INDS 430H, section 2	Case Studies in Public	0	2	Fizza Gulamali-Majid	
	Honors	Health	3	۷		

Fall 2015	INDS 430, section 3	Kinetic Sculpture Project	3	5	Steven McAlpine, INDS	
Fall 2015	INDS 480, section 1	Capstone Project Seminar			Eric Montgomery	
			2	8		
Fall 2015	INDS 480, section 2	Capstone Project Seminar			Asif Majid	
			2	8		
Fall 2015	INDS 490	Capstone Project	3	3		
Fall 2015	INDS 490 Honors	Capstone Project, Honors				
			4	2		
Spring 2016	INDS 330, section 1	Ways of Knowing	3	12	Steven McAlpine, INDS	
Spring 2016	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3	3		
Spring 2016	INDS 330, section 2	Ways of Knowing			Stephen Freeland and Eric	
			3	9	Brown	
Spring 2016	INDS 330, section 2	Ways of Knowing, Honors			Stephen Freeland and Eric	
	Honors		3	2	Brown	
Spring 2016	INDS 335	Degree Plan Writing			Eric Brown	
		Seminar	1	15		
Spring 2016	INDS 399	Guided Reading in INDS	1	11	Samirah Hassan	
Spring 2016	INDS 400	INDS Independent Study	1-4	15		
Spring 2016	INDS 410	INDS Internship	1-4	6		
Spring 2016	INDS 430, section 1	Astrobiology	3	15	Stephen Freeland	
Spring 2016	INDS 430H, section 1	Astrobiology			Stephen Freeland	
	Honors		3	3		
Spring 2016	INDS 430, section 2	Kinetic Sculpture Project	3	1	Steven McAlpine	
Spring 2016	INDS 430H, section 2	Kinetic Sculpture Project			Steven McAlpine	
	Honors		3	1		
Spring 2016	INDS 480, section 1	Capstone Project Seminar			Eric Montgomery	
			2	2		
Spring 2016	INDS 480, section 2	Capstone Project Seminar			Stephen Freeland	
			2	2		
Spring 2016	INDS 490	Capstone Project	3	9		
Spring 2016	INDS 490 Honors	Capstone Project, Honors				
			4	6		
Fall 2016	INDS 330, section 1	Ways of Knowing	3	13	Steven McAlpine, INDS	
Fall 2016	INDS 330H, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	4		
Fall 2016	INDS 330, section 2	Ways of Knowing			Stephen Freeland and Eric	
			3	15	Brown, INDS	
Fall 2016	INDS 330, section 2	Ways of Knowing, Honors			Stephen Freeland and Eric	
	Honors		3	2	Brown, INDS	
Fall 2016	INDS 335, section 1	Degree Writing Seminar	1	7	Eric Brown, INDS	
Fall 2016	INDS 335, section 2	Degree Writing Seminar	1	2		
Fall 2016	INDS 399	Guided Reading in INDS	1	4	Samirah Hassan, INDS	
Fall 2016	INDS 400	INDS Independent Study	1-4	2		
Fall 2016	INDS 410	INDS Internship	1-4	12		
Fall 2016	INDS 430, section 1	Religion and Science	3	7	Stephen Freeland, INDS	

Fall 2016	INDS 430H, section 1	Religion and Science			Stephen Freeland, INDS	
	Honors		3	1		
Fall 2016	INDS 430, section 2	Creative Survey Design	3	7		
Fall 2016	INDS 430, section 3	Kinetic Sculture Project	3	6	Steven McAlpine, INDS	
Fall 2016	INDS 480, section 1	Capstone Project Seminar			Tabassum Majid, INDS	
			2	12		
Fall 2016	INDS 480, section 2	Capstone Project Seminar			Stephen Freeland, INDS	
			2	7		
Fall 2016	INDS 490	Capstone Project	3	5		
Spring 2017	INDS 330, section 1	Ways of Knowing	3	12	Steven McAlpine, INDS	
Spring 2017	INDS 330, section 1	Ways of Knowing, Honors			Steven McAlpine, INDS	
	Honors		3	4		
Spring 2017	INDS 330, section 2	Ways of Knowing			Stephen Freeland and Eric	
			3	12	Brown, INDS	
Spring 2017	INDS 330, section 2	Ways of Knowing, Honors			Stephen Freeland and Eric	
	Honors		3	1	Brown, INDS	
Spring 2017	INDS 335	Degree Writing Seminar	1	10	Eric Brown, INDS	
Spring 2017	INDS 335	Degree Writing Seminar	1	5		
Spring 2017	INDS 399	Guided Reading in INDS	1	8	Samirah Hassan, INDS	
Spring 2017	INDS 400	INDS Independent Study	1-4	2		
Spring 2017	INDS 400, Honors	INDS Independent Study,				
0.1.00/7		Honors	1-4	1		
Spring 2017	INDS 410	INDS Internship	1-4	1		
Spring 2017	INDS 430	Interdisciplinary Approach			Brian Montgomery	
		to Satellite and Geospatial	0	10		
0		Fusion	3	16	Obertage Freedord, INDO	
Spring 2017	INDS 480	Capstone Project Seminar	0	0	Stephen Freeland, INDS	
Spring 2017	INDS 490	Capstone Project	2 3	<u>2</u> 10		
Spring 2017 Spring 2017	INDS 490 INDS 490 Honors	Capstone Project, Honors	3	10		
Spring 2017		Capsione Project, Honors	4	7		
Summer 2017	INDS 399	Guided Reading in INDS	1	3	Samirah Hassan, INDS	
Summer 2017	INDS 399	Land Your First Internship	I	5	Kacie Lawrence	
	11103 410	Land Tour First Internship	1	9		
Fall 2017	INDS 330, section 1	Ways of Knowing	3	14	Steven McAlpine, INDS	
Fall 2017	INDS 330, section 1	Ways of Knowing, Honors	0	17	Steven McAlpine, INDS	
1 411 2017	Honors	Ways of Knowing, Honors	3	3		
Fall 2017	INDS 330, section 2	Ways of Knowing	•		Stephen Freeland and Eric	
1 411 2017		Ways of Knowing	3	14	Brown, INDS	
Fall 2017	INDS 330, section 2	Ways of Knowing, Honors	0		Stephen Freeland and Eric	
	Honors		3	1	Brown, INDS	
Fall 2017	INDS 335	Degree Writing Seminar	2	7	Eric Brown, INDS	
Fall 2017	INDS 399	Guided Reading in INDS	1	8	Samirah Hassan	
Fall 2017	INDS 400	INDS Independent Study	1-4	1		
Fall 2017	INDS 430	Kinetic Sculpture Project	3	4	Steven McAlpine, INDS	
Fall 2017	INDS 410	INDS Internship	1-4	1		

Fall 2017	INDS 480, section 1	Capstone Project Seminar			Tabassum Majid, INDS	
			2	7		
Fall 2017	INDS 480, section 2	Capstone Project Seminar			Stephen Freeland, INDS	
			2	2		
Fall 2017	INDS 490	Capstone Project	3	1		
Fall 2017	INDS 490 Honors	Capstone Project, Honors				
			4	2		

						Table 1A:	Course Pre				Fall 2010 to	5 Fall 2017						
									mary of Ta									
								Source: INI	DS Departr	nental Data	1							
				Su	mmary of C	ourses Offe	red					Sumr	nary of Inst	ructors	Sun	nmary of Stu	udent Enrol	ment
Semester	INDS 232	INDS 330 & 330H	INDS 335	INDS 399	INDS 400 & 400H	INDS 410	INDS 430 & 430H	INDS 480	INDS 490 & 490H	classes	independe nt study		Adjunct- taught	Core staff- taught	Semester	Majors	Number of Approved Degree Plans	Number of Graduate s
Fall 2010		30			2	9	15	24	9	89	65	Fall 2010	5	3	Fall 2010	176	5 18	8
Spring 2011		32			2	10	9	8	25	86	67	Spring 2011	з	4	Spring 2011	162	. 17	25
Summer 2011						2				2	0	Summer 2011			Summer 2011			2
Fall 2011		32			3	9	16	15	4	79	54	Fall 2011	2	6	Fall 2011	151	17	′ 4
Spring 2012		30			2	4	17	12	18	83	62	Spring 2012	4	3	Spring 2012	130	) 14	19
Summer 2012										0	0	Summer 2012			Summer 2012			2
Fall 2012		32			2	9	15	22	8	88		Fall 2012	5	3	Fall 2012	159	13	5 7
Spring 2013		33			2	7	13	9	19	83	63	Spring 2013	3	4	Spring 2013	130	) g	12
Summer 2013									1	1		Summer 2013			Summer 2013			4
Fall 2013		33	8		2	6	11	11	10	81		Fall 2013	5	4	Fall 2013	117	· 4	. 9
Spring 2014		32	5		4	6	34	6	13	100	60	Spring 2014	3	7	Spring 2014	122	2 8	10
Summer 2014										0		Summer 2014			Summer 2014			4
Fall 2014	18	40	16	3	9	9	3	13	4	97		Fall 2014	5	7	Fall 2014	133	3 11	5
Spring 2015		45	18	5	1	7	47	4	13			Spring 2015	3	11	Spring 2015	132		13
Summer 2015		8			2	1				11		Summer 2015	2		Summer 2015			
Fall 2015	15	32	11	8	5	11	22	16	5	110		Fall 2015	6	8	Fall 2015	128	15	i 3
Spring 2016		26	15	11	14	6	20	4	16	112	86	Spring 2016	1	11	Spring 2016	112	2 0	14
Summer 2016										0		Summer 2016			Summer 2016			
Fall 2016		34	9	4	2	12	21	19	5	106		Fall 2016	2	9	Fall 2016	111	8	6
Spring 2017		29	15	8	3	1	16	2	17	91		Spring 2017	1	7	Spring 2017	101	12	18
Summer 2017				3		9				12		Summer 2017	1	1	Summer 2017			
Fall 2017		32	7	8	1	1		9	3	61		Fall 2017	1	8	Fall 2017	90	) 5	2



Semester

Adjunct-taught and Core staff-taught

# Table 2: Substantive Program Modifications

# Interdisciplinary Studies Committee (ISC) Actions and Undergraduate Council (UGC) Approvals Source: INDS Departmental Data

Date	Change	Reason for Change
11/1/2011	Noticed that the catalog had INDS 330 as a pre-req for INDS 480	
4/20/2012	UGC approved ENGL 100 as pre-req for INDS 330	INDS 330 is writing intensive
10/4/2012	INDS 480 is now 2 credits	
June 2013	Dr. Stephen Freeland fills the leadership role at INDS after Ms. Patricia La Noue's retirement.	
Summer 2013	The UMBC Garden, a student-led project with faculty mentor and INDS staff member Jill Wrigley, won a Breaking Ground grant for \$2,300 in summer 2013. INDS has since helped the Garden raise an additional \$24,000 from (a) winning the UMBC Prove It competition (\$10,000) and (b) successfully competing for further \$14,000 funding from SGA.	Jill had been an advocate for the farm to schools movement, and a founding member of Great Kids Farm in Ellicott City. She created a section of INDS 430 to encourage student research and project based learning.
August 2013	INDS reorganized to report to Office for Undergraduate Education (OUE). In February 2014, OUE changes name to Undergraduate Academic Affairs.	INDS is grouped with other cross-disciplinary programs such as the Honors College and the Womens Center (nine divisions in all).
Fall 2013	Steven McAlpine won a Hrabowski Fund for Innovation grant for INDS for \$2,400 to introduce INDS 335, the Degree Writing Seminar. In this 1-credit course - developed by Eric Brown - students gain enhanced understanding of interdisciplinary scholarship, proposal-writing skills, and a further sense of community in the INDS program.	The course was developed to provide a support for students developing interdisciplinary degree plans; in essence, to take an extracurricular activity and organize it into a structured, peer assisted learning experience.
Fall 2013	INDS 335 was piloted as INDS 400 Fall 2013. March 2014 UGC approves change in number to INDS 335. October 2016 INDS 335 is a required course. February 2017 UGC approves change in grading method from P/F to Regular, and approves 1 credit to 2 credits. INDS Degree Plan Rubric was implemented for use by students, staff, and members of the ISC	
3/27/14	INDS 399, INDS 232 and INDS 335 are requested as new courses to be offered Fall 2014	

		I
March 2014	UGC approved INDS 399 as a course. October 2016 UGC approved 399 to be required part of INDS curriculum.	399 was developed to 1) help students to create an online portfolio of INDS work; 2) get students to read widely in the literature of their proposed capstone project.
Spring 2014	Assistant Director Steven McAlpine won a Breaking Ground grant for INDS for \$1,935 to form an interdisciplinary team of undergraduate students who worked over three semesters to design, build and race an entry in the May 2015 Baltimore Kinetic Sculpture Race.	McAlpine - inspired by Wrigley's project based learning model - designed a section of INDS 430 to connect UMBC students with local and downtown communities.
Fall 2014	Proposed a Living Learning Communuity to launch Fall 2014	INDS was interested in building community amongst INDS students.
Spring 2015	Offered new award, the La Noue scholarship, which sends a students to present their work at the AIS conference.	
Summer 2015	Moved to first floor of Fine Arts building	Upper floors are renovated and reorganized. Our former offices are now Global Studies., a major we incubated as IGS.
Fall 2015	Introduced the Zainab Damji Memorial Scholarship Endowment for student who demonstrate a commitment to service, education and leadership in INDS.	
January 2016	UAA Assessment Team established	Divisions are tasked with developing a "dashboard" for program assessment.
May 2016	INDS establishes Advisory Board	Whereas the ISC serves primarily to review degree plans and to maintain rigor in the quality of plans, the advisory board is a valuable "big picture" group of faculty and staff that can help INDS to navigate a shifting political landscape at UMBC.
October 2017	Hosted AIS Conference	INDS aspires to create an "experiential" academic conference entitled "Beyond Talking Heads."

				e 3: Five-Ye urce: DW.EI	-					
		<b>D</b>					00/0017			
		Prepai	-	BC Office of			09/2017.			
			UMBC F	Y 2018 Acad	iemic Progr	am Review				
	Fall	2012	Fall	2013	Fall	2014	Fall	2015	Fall	2016
	len/len	2012	len/len	2013	len/len	2014	len/len	2013	len/len	2010
	Track	Off Track	Track	Off Track	Track	Off Track	Track	Off Track	Track	Off Track
Status										
Full-Time	0	0	1	0	1	0	1	0	1	0
Part-Time	0	2	0	2	0	3	0	4	0	1
Highest Degree										
Bachelor	0	0	0	0	0	0	0	0	0	0
Master	0	0	0	0	0	0	0	0	0	0
1st Prof.	0	0	0	0	0	1	0	1	0	0
Doctorate	0	2	1	2	1	2	1	2	1	1
No Degree	0	0	0	0	0	0	0	1	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
Rank										
Professor	0	0	0	0	0	0	0	0	0	0
Assoc Prof	0	0	1	0	1	0	1	0	1	0
Asst Prof	0	0	0	0	0	0	0	0	0	0
Instructor	0	1	0	1	0	3	0	4	0	1
Lecturer	0	1	0	1	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Race										
2 or More	0	0	0	0	0	0	0	1	0	0

Amer. Indian	0	0	0	0	0	0	0	0	0	(
Asian	0	0	0	0	0	1	0	1	0	1
Black	0	1	0	1	0	0	0	0	0	(
Hawaii/Pac	0	0	0	0	0	0	0	0	0	C
Hispanic	0	0	0	0	0	0	0	0	0	(
International	0	0	0	0	0	0	0	0	0	C
Not Specified	0	0	0	0	0	0	0	0	0	C
White	0	1	1	1	1	2	1	2	1	(
Gender										
Female	0	1	0	1	0	2	0	2	0	1
Male	0	1	1	1	1	1	1	2	1	(
Age										
(Median)		33.5	43	34.5	44	48	45	42.8	46	28
Total	0	2	1	2	1	3	1	4	1	1

	Table	4: Interdisciplinary Studies Committee (ISC	)
	All Membe	ers of the ISC from AY 2010-2011 to AY 2017-2	2018
		Source: INDS Departmental Data	
AY 2010-2011	Tim Gindling	Economics	
	David Eisenmann	Biological Sciences	
	lan George	Physics	
	Brian Grodsky	Political Science	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Robin Majeski	Erickson School of Aging Studies	
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Stanley McCray	Modern Languages, Linguistics and Intercultural Communication	
	Antonio Moreira	Vice Provost for Academic Affairs	non-voting member
	Tim Oates	Computer Science and Engineering	
	Joshua Okundaye	Social Work	
	Patricia Scully	Education	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Lisa Pace Vetter	Interdisciplinary Studies	non-voting member
	Fred Worden	Visual Arts	
	Christina Briscoe	Student Representative	Public Health in the Latino Community
	Avery Greene	Student Representative	Critical Thinking with Perspectives in Law
AY 2011-2012	David Eisenmann	Biological Sciences	
	Brian Grodsky	Political Science	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Antonio Moreira	Vice Provost for Academic Affairs	non-voting member
	Timothy Oates	Computer Science and Engineering	

	Michele Osherow	English	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	James Scott	Interdisciplinary Studies	non-voting member
	Carolyn Tice	Social Work	
	Fred Worden	Visual Arts	
	Alyson Becker	Student Representative	Intercultural Communication and East Asian Studies
	Avery Greene	Student Representative	Critical Thinking with Perspectives in Law
AY 2012-2013	Guenet Abraham	Visual Arts	
	David Eisenmann	Biological Sciences	
	Tim Gindling	Economics	
	lan George	Physics	
	Brian Grodsky	Political Science	
	Maggie Holland	Geography and Environmental Systems	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Antonio Moreira	Vice Provost for Academic Affairs	non-voting member
	Timothy Oates	Computer Science & Engineering	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Holly Sneeringer	English	
	Carolyn Tice	Social Work	
	Rachelle Epstein	Student Representative	Bio-Cultural Hominid Anthropology
	Adam Gerber	Student Representative	Neuropsychology
AY 2013-2014	Guenet Abraham	Visual Arts	
	Ken Baron	Academic & Pre-Professional Advising	
	Eric Brown	Interdisciplinary Studies	non-voting member

	David Eisenmann	Biological Sciences	
	Stephen Freeland	Interdisciplinary Studies	non-voting member
	lan George	Physics	
	Tim Gindling	Economics	
	Brian Grodsky	Political Science	
	Maggie Holland	Geography and Environmental Systems	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Diane Lee	Undergraduate Education	
	Robin Majeski	Erickson School of Aging Studies	
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Timothy Oates	Computer Science & Engineering	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Holly Sneeringer	English	
	Jill Wrigley	Interdisciplinary Studies	non-voting member
	Rachelle Epstein	Student Representative	Bio-Cultural Hominid Anthropology
	Shyam Patel	Student Representative	Biopsychological Perspectives in Pediatric Oncology
AY 2014-2015	Guenet Abraham	Visual Arts	
	Ken Baron	Academic & Pre-Professional Advising	
	Eric Brown	Interdisciplinary Studies	non-voting member
	David Eisenmann	Biological Sciences	
	Stephen Freeland	Interdisciplinary Studies	non-voting member
	lan George	Physics	
	Maggie Holland	Geography and Environmental Systems	
	Ravi Kuber	Information Systems	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Diane Lee	Undergraduate Education	

	Robin Majeski	Erickson School of Aging Studies	
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Janet McGlynn	Undergraduate Education	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Christopher Varlack	English	
	Jill Wrigley	Interdisciplinary Studies	non-voting member
	Kelsey Donnellan	Student Representative	Community Health and Nutrition
	Yoo-Jin Kang	Student Representative	Psychosocial and Cultural Perspectives on Violence
AY 2015-2016	Ken Baron	Academic & Pre-Professional Advising	
	Barbara Bourne	Education	
	Eric Brown	Interdisciplinary Studies	non-voting member
	Stephen Freeland	Interdisciplinary Studies	non-voting member
	Symmes Gardner	Center for Art, Design, and Visual Culture	
	Maggie Holland	Geography and Environmental Systems	
	Ravi Kuber	Information Systems	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Diane Lee	Undergraduate Education	
	Robin Majeski	Erickson School of Aging Studies	
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Janet McGlynn	Undergraduate Education	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Simon Stacey	Honors College	
	Michelle Starz-Gaiano	Biological Sciences	
	Christopher Varlack	English	
	Jill Wrigley	Interdisciplinary Studies	non-voting member
	Priyanka Prasad	Student Representative	Neuroscience of Aging

	Michelle Seu	Student Representative	Human Aesthetics
AY 2016-2017	Jasmine Abrams	Psychology	
	Ken Baron	Academic & Pre-Professional Advising	
	Eric Brown	Interdisciplinary Studies	non-voting member
	Lisa Cella	Music	
	Stephen Freeland	Interdisciplinary Studies	non-voting member
	Symmes Gardner	Center for Art, Design, and Visual Culture	
	Krystl Haerian	Health Information Technology	
	Maggie Holland	Geography and Environmental Systems	
	Patricia La Noue	Interdisciplinary Studies	non-voting member
	Robin Majeski	Erickson School of Aging Studies	
	Steven McAlpine	Interdisciplinary Studies	non-voting member
	Janet McGlynn	Undergraduate Education	
	Carrie Sauter	Interdisciplinary Studies	non-voting member
	Michelle Starz-Gaiano	Biological Sciences	
	Michele Stites	Education	
	Christopher Varlack	English	
	Nimasha Fernando	Student Representative	Intercultural Health
	Rosa Rada	Student Representative	Food Systems Policy
AY 2017-2018	Jasmine Abrams	Psychology	
	Ken Baron	Academic & Pre-Professional Advising	
	Eric Brown	Interdisciplinary Studies	non-voting member
	Lisa Cella	Music	
	Stephen Freeland	Interdisciplinary Studies	non-voting member
	April Householder	Undergraduate Education	
	Patricia La Noue	Interdisciplinary Studies	non-voting member

David L	ansing	Geography and Environmental Systems	
Steven	McAlpine	Interdisciplinary Studies	non-voting member
Neil Ro	thman	Mechanical Engineering	
Carrie	Sauter	Interdisciplinary Studies	non-voting member
Simon	Stacey	Honors College	
Michell	e Starz-Gaiano	Biological Sciences	
Christo	pher Varlack	English	
Heathe	r Mortimer	Student Representative	Science Communication
Tyler B	rocious	Student Representative	Stress on Emergency Health Professionals

Table 5: Resources										
	Source: Provost's Office - Associate Provost for Financial Management									
PROGRAM FACULTY										
Program:										
# of Tenured Faculty:		# of Ten-Track Fac:								
PROGRAM EXPENDITUR	RES									
	Gen. Instruct.		Total							
	State Supported	Non State Supp.	Instructional	Research Exp	Research Exp	Total				
Object of Expenditures	Expenditures	Expenditures	Expenditures	Restricted	Un-Restricted	Expenditures				
Salaries - Ten/Track Fac	105633.83		105633.83			105633.83				
Salaries - Other Faculty	8062.49		8062.49		1636.32	9698.81				
Salaries - All Other	313085.98		313085.98		1629.75	314715.73				
Other Exp.	24254.1		24254.1			24254.1				
Total Prog. Expenditures	451036.4	0	451036.4	0	3266.07	454302.47				

	Table	6: Contril	outions to	o the Pro	fession			
Source: UMBC Faculty Annua	al Report of		ictional pr ad Report		; Grants ii	nformatio	n as reporte	ed in Faculty
Preļ	pared by: U	MBC Offic	e of Institu	ıtional Re	search, 0	9/2017.		
OUTCOMES								
SCHOLARSHIP & RESEARC	СН							
		CY12	CY13	CY14	CY15	CY16		
A. System Indicators	•	•				•	•	-
# of Books Published (Lines I1+I2+I3)	Line 29	0	C	C	0	C	)	
# of Refereed Works	Line 30	n.a.						
# of Non-refereed Works	Line 31	n.a.						ļ
# of Creative Activities	Line 32	n.a.						
# of Presentations (Lines I5+I6)	Line 33	0	0	C	0	C	)	
# of Research Grants	Line 34	n.a.	n.a.	n.a.	n.a.	n.a.		
# of Faculty Awarded Research Grants	Line 35	n.a.	n.a.	n.a.	n.a.	n.a.		
\$ of Research Grants	Line 36	n.a.	n.a.	n.a.	n.a.	n.a.		
B. Institution-Specific Quality	Indicators /	Accountat	l pility Indica	ators				
# of Textbooks Published	Line I1	n.a.			NOTE: V Measure		t have FAR	or Digital
# of Edited Books Published	Line I2	n.a.				INDS fac d Reports		l as Faculty
# of Other Books Published	Line I3	n.a.						
# of Presentations to Intern./Nat. Org.	Line I5	n.a.						
# of Presentations to Regional/Local Org.	Line I6	n.a.						
# of Scholarly Awards by Intern./Nat. Org.	Line I7	n.a.						
# of Scholarly Awards by Regional/Local Org.	Line I8	n.a.						
# Days spent preparing proposals, presentations	Line I9	n.a.						

Table	7: Indicato	ors of Acade	emic Progra	m Cost and	d Productiv	vity	
SOURCE: DW.F			Credit Hou		aculty Work	load Report	S;
Pr	epared by: L	JMBC Office	e of Institution	nal Researc	h, 09/2017.		
			<u></u>				
			FY13	FY14	FY15	FY16	FY17
A. System Indicators							
Total Credit Hours							
Generated	Line 11		436	490	734	543	489
Undergraduate LD	Line 12		0				
Undergraduate UD	Line 13		436	490			489
Graduate I*	Line 14		0		0	0	0
Graduate II	Line 15		0	0	0	0	0
Graduate III	Line 16		0	0	0	0	0
Total FTES	Line 17		14.5	16.3	24.5	18.1	16.3
% Cr Hr Generated by Ten/Ten-Track Fac	Line 18						
Undergraduate LD	Line 19						
Undergraduate UD	Line 20						
Graduate	Line 21						
No. of Degrees Awarded							
Bachelor's	Line 24		21	23	22	16	22
Masters	Line 25		0	0	0	0	0
Doctorate	Line 26		0	0	0	0	0
Post-Bacc Certificate	Line 27		-	-	-	-	-
Ratio of FTES/FTEF	Line 28		22	9.8	12.3	7.8	12.3
B. Institution-Specific Qua	lity Indicator	s					
Total FTEF	,		0.66	1.66	1.99	2.32	1.33
FTEF of FT and PT Facult	tv		0.66	1.66	1.99		
FTEF of Grad Teaching A	-						
* Graduate I, II, and III cre research credit hours (799 course credit hours taken hours taken by any studer	and 899 co by PhD stuc	urse credit l lents. Grad l	nours); Grad I refers to all	II refers to	regular grac	luate	

Table 8: Service to the service to t		•				
Source: UMBC Faculty An			•			
Prepared by: UMBC C	office of Inst					
		CY12	CY13	CY14	CY15	CY16
A. System Indicators						
Institution						
# of Departmental, Inst. and System Committees						
( 10+ 11+ 12)	Line 37	0	0	0	0	0
# of Undergraduates Advised	Line 38	n.a.				
Profession						
# of Peer Review Panels & Accrediting Teams						
(l13+l14)	Line 39	0	0	0	0	0
# Manuscripts Read/reviewed	Line 40	-				
# of Journals Served as Editor, Area Editor, Etc.						
(115+116)	Line 41	0	0	0	0	0
# of Offices Held in Professional Organizations						
(I17+I18)	Line 42	0	0	0	0	0
Public						
# of Patents Applied for	Line 48	fooulty				
NOTE: We do not have FAR or Digital Measures da		lacuity.				
B. Institution-Specific Quality Indicators / Accountability Indicators						
Institution						
# of Departmental Committees	Line I10					
# of Institutional Committees	Line I11					
# of System Committees	Line I12					
Profession						
# of Peer Review Panels & Accrediting Teams	Line I13					
# of Accreditation and Certification Teams	Line I14					
# of Journals Editorship & Sub-area Editorship	Line I15					
# of Journals Associate Editorship & Editorial Board	Line I16					
# of Offices Held in Inter./Nat. Org.	Line I17					
# of Offices Held in Regional/Local Org.	Line I18					
Public						
# Days Spent on Professional Services	Line I19					
# Days spent on Administrative & Committee						
Assignments	Line I20					

### Table 9: Faculty Mentors by Department

Data indicates those who have served as faculty mentors to INDS students; a comparison from last APR (2011) to the current APR (2018) Source: INDS Departmental Data

Fall 2003-Spring 2010 (2011 APR)

Faculty Advisor	Department	INDS Student
Administrative and Ma		
Croteau, Marcia	Alyssa Anderson	
Groleau, Marcia	ADMN SCI	Barbara Bittick
		Chia-Hsin Hsueh
		Truc Nguyen
		Darryl Collins
		Noah Dankner
		Brian Duffy
		Gulnaz Anwar
		Heather Valentine
-		Janelle Cree Broderick
		Jessica Zachmeier
	1	Reginald Stalling II
	1	Valerie Leek
		Alexander Witkin
Sugar, Stephen	ADMN SCI	Sarah Blumsack
ougar, otoprion	ADMIN COI	Salah Bidhisack
Africana Studies	AFOT	
Badru, Lateef	AFST	Jeneba Daramy Julius Maina
Peters, Jonathan	AFST	Wambui Kamiru
Robinson, Thomas Jr.	AFST	Jamie Pierce
,	-	
Aging, Management o		
Majeski, Robin	AGNG	Dorcas Apata
<b>D</b>	10110	Sara Barger
Ronch, Judah	AGNG	Lea Sternbach
-		Tabassum Majid
-		
	1	
American Studies		
Bryan, Kathy	AMST	Zaheed Adetoro
King, Paula Nicole	AMST	Janelle Cree Broderick Carly Fitzpatrick
McDermott, Patrice	AMST	Nickole Halpine
Moffitt, Kimberly	AMST	Amanda Fefel
	1	Kristin Drabyn
	1	Brian Duffy

#### Faculty Advisor INDS Student Department **INDS Degree Title** Management MGMT Carmack, Paul Frock, Sue Management and Music Technology Development MGMT Keys, Melanie Roogow, Irving Marketing Sadler, Patricia MGMT Ellerby, Brandon Media Entrepreneurship Nicholson, Eric Sustainable Practices in Management Flather (Glauser), Brittar Information and Digital Media Management Alex Brown Center for Entrepreneurship Armor, Vivian ENTR Osazuwa, Christine Music Journalism and Entrepreneurship Lilly, Kayla Event Management Pesci, Michael Management and Communications in the Sports Industry Perdue, Courtney Media Management and Music Performance Proctor, Markus Technology Entrepreneurship and Organizational Management Ponter, Evan Music Entrepreneurship ENTR Schmulowitz, John Mason, Gib Music Entrepreneurship Schwarzenberg, Erik Health and Wellness Entrepreneurship Massey, Josh Leadership Development and Social Entrepreneurship Wertlieb, Brendan J Music and Social Entrepreneurship Camacho, Andres Entrepreneurship and Digital Communication Africana Studies Badru, Lateef AFST Joseph, Achsah Genocide, Human Rights and International Diplomacy Blevins, Jeanie Social Issues in sub-Saharan Africa Management of Aging Services Majeski, Robin AGNG Rosenbluth, Tali Pediatric Physical Therapy Vanik, Paul Biomedical Science and Healthcare Systems Daniel, Dana Pediatric Health Psychology Prasad, Priyanka Neuroscience of Aging Pitkanen, Nicole Approaches in Therapeutic Physical Functioning AGNG Neuropsychology Ronch, Judah Hoff, Sharde Kelly, Rachel Biopsychosocial Approaches to Health Neuroscience and Developmental Aging Karamsetty, Madhu Jones, Jasmine Human-Computer Interaction in an International Cultural Context American Studies Bryan, Kathy AMST Louis. Matthania After-School Education Moffitt, Kimberly AMST Mulcahy, Shannon Sports Psychology and Marketing Godwin, Rebecca Sports and Media Management Poillon, Peet Entrepreneurship in Sports Turner, Rita AMST Brightman, Julianna Food System Studies

Kelbaugh III, Michael K. Afterschool Education through the Performing Arts

### Fall 2011-Spring 2017 (2018 APR)

l	1	Emily Thompson
		Joseph Fowler
		Jonathan Hart
		Natalie Wilson
		Matthew Sherman
Orser, Ed	AMST	Katherine Gagne
Orser, Ed	AIVIST	
	A1407	Jonathan Posner
Wallace, Kendra	AMST	Jamie Pierce
Ancient Studies		
Goldberg, Marilyn	ANCS	Stephanie Meredith
Koehler, Carolyn	ANCS	Sara Barger
Read, Esther	ANCS	Maria McAllister
Anthropology		
Kavanagh, Kathryn	ANTH	Justin Clapp
		Caitlin Iafolla
Chapin, Bambi	ANTH	Melanie Denischuk
		Samantha Bier
Chard, Sarah	ANTH	Nancy Crow
		Laura Dress
		Kasebaoth Mekonnen
		Lujain Said
	1	Puja Patel
Messinger, Scott	ANTH	Julius Maina
nioconiger, cook		Ashley Newman
		Heather Luttrell
Donato, Paul	ANTH	Allison Buckley
Donato, i adi	7.00111	Animari Fermaint
		Animan remaint
Biological Sciences		
Brewster, Rachel	BIOL	Andy Windsor
Caruso, Steven	BIOL	Dorcas Apata
	5.02	Murteza Shahkolahi
		Udara Perera
Eisenmann, David	BIOL	Melissa Gilden
Liseninanii, Daviu	BIOL	Segen Moges
Fleischmann, Esther	BIOL	Briana Palumbo
rieischmann, Esther	BIUL	Darryl Collins
		Nancy Crow
	+	Kristin Drabyn
		Ashley Newman
		Llacey Simmons
Freeland, Stephen	BIOL	Cheryl Jaworski
	1	Jeremy Swan
Lake, Reagan	BIOL	Jenifer Morse
Lindahl, Lasse	BIOL	Stephanie Kirk
MacKay, Brian	BIOL	Caitlin Iafolla
Nessly Craig	BIOL	Justin Lingel
Sandoz, Jim	BIOL	Amanda Page
· · · ·		Laura Dress
		Puja Patel
	+	Tigue Tozer
Tagamets, Malle	BIOL	
Tagamets, Malle Viancour, Teresa	BIOL	Sunitha Nune Heather Valentine

Ancient Studies			
Read, Esther	ANCS	McAllister, Maria	Innovation in Region
neau, Esther	ANCS	MCAIIISter, Maria	Innovation in Design
Anthropology			
Chapin, Bambi	ANTH	Fernando, Nimasha	Intercultural Health
onapin, Dambi	7331111	Briscoe, Christina	Public Health in the Latino Community
		Kang, Yoo-Jin	Psychosocial and Cultural Perspectives on Violence
Chard, Sarah	ANTH	Blevins, Jeanie	Social Issues in sub-Saharan Africa
onara, oaran	733111	Jeyaraju, Maniraj	Health Ethnography
Kavanagh, Kathryn	ANTH	Spicer, Wendy C.	Social and Cultural Interpretations of Traditional Medicine
Messinger, Seth	ANTH	Epstein, Rachelle	Bio-Cultural Hominid Anthropology
wessinger, Setti		Hawkins, Samantha	Visual Research Methodology
Rubenstein, Robert	ANTH	Meiser, Miriam Noelle	Missionary Medicine and Perspectives on Healing
		Weiser, Willam Noelle	Missionary Medicine and reispectives of riealing
Biological Sciences			
Biological Sciences		Carbor Adam	
Brewster, Rachel	BIOL	Gerber, Adam	Neuropsychology
	BIOL BIOL	Kelly, Rachel	Biopsychosocial Approaches to Health
Brewster, Rachel		Kelly, Rachel Frazer, Bernardine	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care
Brewster, Rachel		Kelly, Rachel Frazer, Bernardine Slosser, Kira	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus
Brewster, Rachel Caruso, Steven	BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries
Brewster, Rachel Caruso, Steven Claassen, Lark	BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health
Brewster, Rachel Caruso, Steven	BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David	BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David	BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G.	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health
Brewster, Rachel Caruso, Steven Claassen, Lark	BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther	BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen	BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer	BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen	BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer	BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer	BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne Schwarzenberg, Erik	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah	BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel         Frazer, Bernardine         Slosser, Kira         Allinder, Jason         Destefano, Nicholas         Mizell, Marina         Patel, Shyam         Goles, Jillian G.         Yap, Shane         Donnellan, Kelsey         Viola, Donna         Funk, Karli         Kadavil, Shana         Correa, Chris-Anne         Schwarzenberg, Erik         Kimery, Randy Jr.	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Healthcare Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah Mendelson, Tamra	BIOL BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel         Frazer, Bernardine         Slosser, Kira         Allinder, Jason         Destefano, Nicholas         Mizell, Marina         Patel, Shyam         Goles, Jillian G.         Yap, Shane         Donnellan, Kelsey         Viola, Donna         Funk, Karli         Kadavil, Shana         Correa, Chris-Anne         Schwarzenberg, Erik         Kimery, Randy Jr.         Justus, Kevin	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Animal Behavior
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah	BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne Schwarzenberg, Erik Kimery, Randy Jr. Justus, Kevin Opitz, Allison	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Healthcare Pediatric Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Animal Behavior Science Communication
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah Mendelson, Tamra Miller, Stephen	BIOL BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne Schwarzenberg, Erik Kimery, Randy Jr. Justus, Kevin Opitz, Allison	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Animal Behavior Neuropsychology
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah Mendelson, Tamra Miller, Stephen Omland, Kevin	BIOL BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne Schwarzenberg, Erik Kimery, Randy Jr. Justus, Kevin Opitz, Allison Offenbacher, Kaili Wang, Hao	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Integrative Health and Entrepreneurship Science Communication Neuropsychology Medical Illustration
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah Mendelson, Tamra Miller, Stephen Omland, Kevin Robinson, Phyllis	BIOL BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel         Frazer, Bernardine         Slosser, Kira         Allinder, Jason         Destefano, Nicholas         Mizell, Marina         Patel, Shyam         Goles, Jillian G.         Yap, Shane         Donnellan, Kelsey         Viola, Donna         Funk, Karli         Kadavil, Shana         Correa, Chris-Anne         Schwarzenberg, Erik         Kimery, Randy Jr.         Justus, Kevin         Opitz, Allison         Offenbacher, Kaili         Wang, Hao         Fincher, Erin	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Healthcare Pediatric Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Integrative Health and Entrepreneurship Neuropsychology Neuropsychology Medical Illustration Visual Communications in Medicine
Brewster, Rachel Caruso, Steven Claassen, Lark Eisenmann, David Fleischmann, Esther Freeland, Stephen Hughes, Jennifer Leupen, Sarah Mendelson, Tamra Miller, Stephen Omland, Kevin	BIOL BIOL BIOL BIOL BIOL BIOL BIOL BIOL	Kelly, Rachel Frazer, Bernardine Slosser, Kira Allinder, Jason Destefano, Nicholas Mizell, Marina Patel, Shyam Goles, Jillian G. Yap, Shane Donnellan, Kelsey Viola, Donna Funk, Karli Kadavil, Shana Correa, Chris-Anne Schwarzenberg, Erik Kimery, Randy Jr. Justus, Kevin Opitz, Allison Offenbacher, Kaili Wang, Hao	Biopsychosocial Approaches to Health Global and Sociocultural Issues in Health Care Physical Therapy Studies with a U.S. Military Focus Biopsychosocial Aspects of Sports Injuries Biopsychosocial Health Pediatric Psychological Neurological Development Pediatric Healthcare Pediatric Health Physical and Psychological Therapy of Athletes Community Health and Nutrition Astrobiology Physiological Psychology Neuroscience Neuropsychology with Statistical Applications Health and Wellness Entrepreneurship Integrative Health and Entrepreneurship Integrative Health and Entrepreneurship Science Communication Neuropsychology Medical Illustration

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Chamiatry		
Chemistry Gieracsh, Tiffany	СНЕМ	Kendyl Downey
Gieracsii, Tiliany		Ali Ashai
		Stacey Edwards
		Kasebaoth Mekonnen
L - O		
LaCourse, William	CHEM CHEM	Llacey Simmons
Perks, Mark	CHEM	Julius Maina
Summers, Michael	СНЕМ	Simonne Jones
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Computer Science and		
Oates, Timothy	CMSC	Stephen Lambert
Pinkston, John	CMSC	Andy Lufburrow
Dance		
Hess-Vait, Carol	DANC	Natalie Blank
		Jennifer Klem
		Rachel Steinhorn
Economics and Finance	cial Economics	
Bradley, Michael	ECON	Christina Moore
		James Tyler
Coates, Dennis	ECON	Emily Thompson
		Carly Fitzpatrick
		Joseph Fowler
		Jonathan Hart
		Natalie Cullers
		Natalie Wilson
		Jim Spamer
Davis, Mary	ECON	Marla Lazarus
Gindling, Thomas	ECON	Louis Leibowitz
cinding, momas	LOON	Christina Hawkins
		Carla Mike
Coldforb Marcha	ECON	David Truscello
Goldfarb, Marsha	ECON	Jesse Austell
		Enable Malana a
Laura d'a Davia	FOON	Emily Wang
Lamdin, Doug	ECON	Andy Lufburrow
Lord, William	ECON	Andy Lufburrow Alexander Witkin
	ECON	Andy Lufburrow
Lord, William Matthias, Cinyabuguma	ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina
Lord, William Matthias, Cinyabuguma McConnell, Virginia	ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova
Lord, William Matthias, Cinyabuguma	ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina
Lord, William Matthias, Cinyabuguma McConnell, Virginia	ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova
Lord, William Matthias, Cinyabuguma McConnell, Virginia Takacs, Wendy	ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova
Lord, William Matthias, Cinyabuguma McConnell, Virginia	ECON ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova
Lord, William Matthias, Cinyabuguma McConnell, Virginia Takacs, Wendy	ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova
Lord, William Matthias, Cinyabuguma McConnell, Virginia Takacs, Wendy Education	ECON ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova Nathaniel Dean
Lord, William Matthias, Cinyabuguma McConnell, Virginia Takacs, Wendy Education	ECON ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova Nathaniel Dean Zaheed Adetoro
Lord, William Matthias, Cinyabuguma McConnell, Virginia Takacs, Wendy Education	ECON ECON ECON ECON	Andy Lufburrow Alexander Witkin Julius Maina Martina Kristianova Nathaniel Dean Zaheed Adetoro DeLeon L. Gray

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Wagnar Cupthia	BIOL	Patel, Himadri Epstein, Rachelle	Neuroscience Bio-Cultural Hominid Anthropology
Wagner, Cynthia	BIOL	Venero, Sophia	
		Seu, Michelle	Community Health and Nutrition Human Aesthetics
		Seu, Michelle	Human Aesthetics
Chemistry			
Gierasch, Tiffany	CHEM	Chioma, Vivian	Neuroscience
		Ohiri, Joyce	Bioethics
Tracy, Allison	CHEM	Rosenbluth, Tali	Pediatric Physical Therapy
Computer Science and	Computer		
desJardins, Marie	CMSC	Salib, Gabrielle	Human-Centered Computing
Kurland, Sharyn	CMSC	Paul, Neena	Computational Education
Nicholas, Charles	CMSC	Packianathan, Jefreena	Human-Centered Computing
		Trapani, Nicholas B.	Criminal Intelligence and National Security
Dance			
Hamby, Doug	DANC	Hester, Mary	Arts Advocacy
Hess-Vait, Carol	DANC	Kimak, Emily	Integrative Arts
Economics and Financ			
Coates, Dennis	ECON	Pesci, Michael	Management and Communications in the Sports Industry
		Godwin, Rebecca	Sports and Media Management
		DiNardo, Stephen	Brand Development
		Poillon, Peet	Entrepreneurship in Sports
Dasgupta, Nandita	ECON	Stetyick, Alyson	Organizational Development
Farrow, Scott	ECON	Vera, Jose	Public Relations and Marketing With Focus on Latin America
Gindling, Tim	ECON	Naszkiewicz, Maciej	Intercultural Entrepreneurship
Lamdin, Doug	ECON	Kim, Chul Soo	Information Systems/ Administrative Science
McConnell, Virgina	ECON	Nicholson, Eric	Sustainable Practices in Management
		Schwartz, Joseph	Social Sustainability
Takacs, Wendy	ECON	Brach, Rebecca	Political and Social Globalization in the Middle East and North Africa
<b>F</b> doo a sti a se			
Education	FDUG	Allees Michalls	Environmentel Caienae in en Elementer: Ol-serre en
Blunck, Susan	EDUC	Alban, Michelle	Environmental Science in an Elementary Classroom
Deurse Derhaus	FDUG	McDaniels, Amie	Urban Elementary Environmental Education
Bourne, Barbara	EDUC	Massarelli, Roxanne	STEM Education and Inclusion
		Tabatabai, Asbah	Sociocultural Education
		Paul, Neena	Computational Education

		Kiya Rich
Scully, Pat	EDUC	Katie Bodmer
		Joy Catterton
Singer, Jonathan	EDUC	StanleyChristopher Buckler
Williams, Vickie	EDUC	Marissa Greenberg
		Lisa Sanchez
Emergency Health Services		
Dean, Stephen	EHS	Murteza Shahkolahi
Polk, Dwight	EHS	Todd Carter
		Dusti Gecz
		Netali Carmel
Engineering		
Carter, Gary	Elec ENG	Eric Montgomery
Rosenfeld, Michael	ENES	Caitlyn Merwin
Spence, Anne	MECH	StanleyChristopher Buckler
000000,7 4440		
English		
Corbett, Christopher	ENGL	Astrid Sperling
Orlin, Lena	ENGL	Austin Kidwell
Pekarske, Nicole	ENGL	Kelly O'Donnell
Shivnan, Sally	ENGL	Catherine Ichniowski
Gender and Women's		
<b>Studies</b> Hagovsky, Elizabeth	GWST	Joy Catterton
Kelber-Kaye, Jodi	GWST	Allison Buckley
		Elizabeth Barr
	1	Masheka Barrett
	1	Cassandra Jenkins
	1	Justin Clapp
	İ	Jacqueline Little
		Melissa Gilden
Geography and Enviro		Obviationa M
Bennett, Sari	GES	Christina Moore
Ellis, Erle Parker, Eugene	GES GES	Heather Modic
Parker, Eugene	GES	Mark Murray Shannon Polvi
School, Joesph	GES	Todd Carter
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Nelson, John	EDUC	Duracka, Juraj	Cultural and Linguistic Studies within the Educational Environment
Oliva, Linda	EDUC	Louis, Matthania	After-School Education
Sanders, Mavis	EDUC	Simmons, Jazmin	Culturally Responsive Techniques in Urban Math Education
Scully, Patricia	EDUC	Tinnirella, Jaime	A Comprehensive Approach to Health, Wellness, and Early Education
Shin, Joan Kang	EDUC	Freitag, Adam	Ludology
Singer, Jonathan	EDUC	Zurkowski, Michael	Engineering Education
Williams, Vickie	EDUC	Hrybyk, Rosalie	Musical Theater Education
williams, wickle	LDOO	Yoncha, Danielle	Environmental Science Education
		Schehr, Melanie	Nutrition Education and Communication
Young, Patricia	EDUC	Kline, Jessica	Elementary Education and Intercultural Competence
roung, Fathola	LDOC	Rille, Jessica	
Emergency Health			
Services			
Krumperman, Kurt	EHS	Hartsky, Lauren	Emergency Care Management
Polk, Dwight	EHS	Gecz, Dusti	Studies in Crisis Response for Emergency Professionals
r olit, D'light	2.10		
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Engineering			
Blaney, Lee	ENGR	Vyas, Suraj	Water Resource Management and Policy
Rothman, Neil	MECH	Starck, Andrew	Engineering Design and Management
Spence, Anne	MECH	Zurkowski, Michael	Engineering Education
openee, rame			
English			
Burgess, Helen	ENGL	Camacho, Andres	Entrepreneurship and Digital Communication
Corbett, Christopher	ENGL	Ko, Phillip	Social Change: Photography and Journalism
Donovan, Julie	ENGL	Calvin, Alexandra	Dramaturgy
Gwiazda, Piotr	ENGL	Leclercq, Lauren	Creative Arts for Children
Mabe, Mitzi	ENGL	Kelbaugh III, Michael K.	
Orgelfinger, Gail	ENGL	Isberg, Allison	Medieval Linguistics
Orlin, Lena	ENGL	Kidwell, Austin W.	Dramaturgy
Pekarse, Nicole	ENGL	Blank, Shayna	Feminist Perspectives on the Literary Arts
r onaroo, moolo	LINGE	Kennedy, Joseph	Criminal Justice
Rudacille, Deborah	ENGL	Opitz, Allison	Science Communication
Shivnan, Sally	ENGL	Schneider, Elizabeth	Science Writing
Varlack, Chris	ENGL	Smith, Kayla	Public Health Advocacy
Vanaok, Ohno	LINGE	onnin, rayia	1 doite field if Advectedy
Gender and Women's	<u> </u>		
Studies			
Benvenga, Michelle	GWST	Saloka, Elizabeth	Gender Equality in Computing
Bhatt, Amy	GWST	Blank, Shayna	Feminist Perspectives on the Literary Arts
Kelber-Kaye, Jodi	GWST	Cantwell, Julia	Visual and Cultural Analysis of Media
		ountrion, ound	
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Geography and Enviro	nmontal		
Aufseeser, Dena	GES	Alban, Michelle	Environmental Science in an Elementary Classroom
	GES	McDaniels, Amie	Urban Elementary Environmental Education
Bennett, Sari	GES	Tanaka, Yohka	
Hollond Morris	CES		Social Entrepreneurship
Holland, Maggie	GES	Vyas, Suraj	Water Resource Management and Policy
Leaster De 11	050	Brightman, Julianna	Food System Studies
Lansing, David	GES	Rada, Rosa	Food Systems Policy
		Dewald, Yelena	International and Global Studies

I	T	I
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Health Administration	and Policy	
Brewer, Mary Anne	HAPP	Stephanie Kirk
History		
Brown, Kate	HIST	Laura Jones
Diowii, Nale	1131	Maryia Nekhayonak-
		Maslennikov
Cohen, Warren	HIST	James Bass
Grubb, James	HIST	Melanie Hamons
citabo, barries	11101	Justin Hanneken
		Samuel Min
Laurie, Clayton	HIST	David Stuart
Laune, Olayton	11101	Christina Stanley
		Vinh (Nguyen) Thai
Lindenmeyer, Kriste	HIST	Shannon Polvi
Scott, Michelle	HIST	Eric Smallwood
	11101	Jacqueline Little
		Shayna Robinson
Simpson, Brad	HIST	Jakana Thomas
Tatarewicz, Joseph	HIST	Diamond Davis
Vaporis, Constantine	HIST	Jessica Zachmeier
Welch, Rickey	HIST	Cheryl Jaworski
Yip, Ka-che	HIST	April Nevitt
		Eric Smallwood
		Tiffany Yi
Information Systems		
Forgionne, Guiseppi	IS	Reginald Stalling II
Komlodi, Anita	IS	Heidi Brueckner
Ozok, A. Ant	IS	Paul Bertulis
Sears, Andrew	IS	Charles Blount
Interdisciplinary		
Studies		
McAlpine, Steven	INDS	Noah Dankner
Yager, Stacey	INDS	Pankaj Kaushal
	-	
Judaic Studies		
Finkelstein, Jonathan	JDST	Sabrina Renzer
Lander, Shira	JDST	Marissa Greenberg
Mathematics and Statistics		
Bell, Johnathan	MATH	Teresa Hum
	MATH	Teresa Hum

1	1	Yoncha, Danielle	Environmental Science Education
Parker, Eugene	GES	Gouliaeva, Ksenia	Wildlife Conservation
Swan, Chris	GES	Bonfante, Robert	Visual and Environmental Studies
	0.20	Bonnanto, Hobort	
Health Administration	and Policy		
Canham, Rhonda	HAPP	Venero, Sophia	Community Health and Nutrition
Stuart, Mary	HAPP	Goles, Jillian G.	Pediatric Health
History			
Johnson, Barney	HIST	Vanik, Paul	Biomedical Science and Healthcare Systems
		<b>- .</b>	
Lindenmeyer, Kriste Meringolo, Denise	HIST HIST	Tabatabai, Asbah Wesolowski, Joseph	Sociocultural Education
Oakes, Julie	HIST	Becker, Alyson	Historic Preservation: Sense of Place Intercultural Communication and East Asian Studies
Oakes, Julie	1131	Marshall, Albert	Public Policy and Media Arts
Oyen, Meredith	HIST	Fowler, Jamie	National Security Studies
Oyen, weredith	11101	Quackenbush, Valerie	Middle Eastern Studies
Yip, Ka-Che	HIST	Fowler, Amy	Domestic Politics of Globalization in Contemporary China
	1.101	Spicer, Wendy C.	Social and Cultural Interpretations of Traditional Medicine
Information Systems			
Branham, Stacy	IS	Saloka, Elizabeth	Gender Equality in Computing
Hurst, Amy	IS	Salib, Gabrielle	Human-Centered Computing
Komlodi, Anita	IS	Jones, Jasmine	Human-Computer Interaction in an International Cultural Context
	10	Berger, Brendan	Educational Software Development
Kuber, Ravi	IS	Packianathan, Jefreena	
Norcio, Anthony	IS IS	Queral, Luis	Story-centric Design for Web-Based Interactive Media
Redding, Tate	15	Kim, Chul Soo	Information Systems/ Administrative Science
Interdisciplinary			
Studies			
Friedensohn, David	INDS	Diehl, Matthew	Entrepreneurship in Media
		Bell, Brian Y.	Entrepreneurial Film and Video
Gulamali-Majid, Fizza	INDS	Fernando, Nimasha	Intercultural Health
McAlpine, Steven	INDS	Starck, Andrew	Engineering Design and Management
Tarantino, David	INDS		Health Resources Development and Management
Wrigley, Jill	INDS	Tanaka, Yohka	Social Entrepreneurship
		Speaks, Lillian	Criminal Justice
Judaic Studies	-		
	+		
Mathematics and	+		
Statistics			
Rakes, Christopher	MATH	Berger, Brendan	Educational Software Development
		Loigoi, Biolidan	

I	I	Sunitha Nune
Suri, Manil	MATH	Diamond Davis
Tighe, Bonny	MATH	Dana Daniels
right, Donny		Bana Baniolo
Media and		
Communication		
Studies		
Loviglio, Jason	MCS	Barbara Bittick
		Cathryna Brown
		Timothy Sparklin
Snyder, Donald	MCS	Justine Acciani
		Natalie Cullers
		d Intercultural Communication
El Omari, Samir	MLL	Timothy Sparklin
Fatih, Zakaria	MLL	Kelly O'Donnell
Field, Thomas	MLL	Patrick Letterii
Ka, Omar	MLL	Shoma Kotwani
		Beverly McDougall
May, Brigitte	MLL	Astrid Sperling
		Atasannow, Peter
Medina, Adriana	MLL	Kendyl Downey
		Lisa Sanchez
		David Truscello
Poggio, Sara	MLL	James Tyler
Music		
Cella, Lisa	MUSC	Alex Broadwater
Rubin, Anna	MUSC	Noah Dankner
ridoni, Anna	10000	Noan Dankiel
Philosophy		
Dywer, Susan	PHIL	Maansi Raswant
Ferry, Michael	PHIL	James Valentine
Thomas, James	PHIL	Peter Atasannow
Wilson, Richard	PHIL	Ali Ashai
Yalowitz, Steve	PHIL	Rich Goldman
Physics		
Anderson, Eric	PHYS	Amanda Page
Choo, Charles	PHYS	Rich Goldman
Shih, Yanhua	PHYS	Eric Montgomery

Tighe, Bonny	MATH	Simmons, Jazmin	Culturally Responsive Techniques in Urban Math Education
Media and			
Communication Studies			
Eagle, Paul	MCS	Grant, Chad	Integrated Marketing Communications
Patton, Elizabeth	MCS	Lilly, Kayla	Event Management
Seidel, Zachary	MCS	DiNardo, Stephen	Brand Development
Shrewbridge, William	MCS	Ellerby, Brandon	Media Entrepreneurship
Snyder, Donald	MCS	Grant, Chad	Integrated Marketing Communications
		Flather, Brittany	Information and Digital Media Management
		Diehl, Matthew	Entrepreneurship in Media
M - d 1			
Modern Languages, L			International Cinema
Bazgan, Nicoleta Field, Thomas	MLLI	Mauler, Steven	International Cinema Medieval Linguistics
rieu, momas		Isberg, Allison Davila, Patricia	Photojournalism with a Focus on Social Issues
McCray, Stanley	MLLI	Awosika, Ladi	Music Management and Performance
Nicolay, Stanley		Walker, Natassia	Food Journalism and Entrepreneurship
		Becker, Alyson	Intercultural Communication and East Asian Studies
		Kazi, Nicole	Political and Cultural Aspects of International Development
		Kline, Jessica	Elementary Education and Intercultural Competence
Medina, Adriana	MLL	Duracka, Juraj	Cultural and Linguistic Studies within the Educational Environment
Poggio, Sara	MLLI	Ndome, Rosine	Health Literacy Promotion and Advocacy for an Immigrant Population
		Naszkiewicz, Maciej	Intercultural Entrepreneurship
Schwartz, Ana Maria	MLL	Vera, Jose	Public Relations and Marketing With Focus on Latin America
Yoon, Kyung-Eun	MLL	Welkner, Nicole	International Intelligence and Cyber Security: China
Music			
Cella, Lisa	MUSC	Perdue, Courtney	Media Management and Music Performance
		Ponter, Evan	Music Entrepreneurship
		Awosika, Ladi	Music Management and Performance
		Goodrich, Daniel	Arts Management
		Montgomery, Ryan	Music Management
Ladd, Gita	MUSC	Walker, Natassia	Food Journalism and Entrepreneurship
Rubin, Anna	MUSC	Brant, Lewis	Digital Media: Art with Technology
		Wertlieb, Brendan J	Music and Social Entrepreneurship
Wonneberger, Alan	MUSC	Carmack, Paul	Management and Music Technology Development
Vaabieka Airi	MUSC	York, Michael	Audio Engineering and Entrepreneurship
Yoshioka, Airi	MUSC	Hrybyk, Rosalie	Musical Theater Education
Philosophy			
Picciuto, Elizabeth	PHIL	Seu, Michelle	Human Aesthetics
Thomas, James	PHIL	Freitag, Adam	Ludology
Wilson, Richard	PHIL		Critical Thinking with Perspectives in Law
		Meiser, Miriam Noelle	Missionary Medicine and Perspectives on Healing
		McCarron, Jason	Studies in Ethical Leadership
		Ohiri, Joyce	Bioethics
Physics			
Anderson, Eric	PHYS	Page, Amanda	Sports Health and American Culture
George, lan	PHYS	Viola, Donna	Astrobiology
		Schneider, Elizabeth	Science Writing

Worchesky, Terence	PHYS	Eric Montgomery
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·	-	
Political Science	DOLL	
Forestiere, Carolyn	POLI	Nathaniel Dean
		Martina Kristianova
		Maryia Nekhayonak-
		Maslennikov
Credela, Drien	POLI	Lujain Said
Grodsky, Brian	POLI	Carla Mike Tzviel Blankchtein
Hagerty, Devin	POLI	Dan Breslaw
	-	Elizabeth Fincham
	-	Gulnaz Anwar
	-	Christina Hawkins
	-	James Bass
	-	Christina Stanley
Hody Cynthia	POLI	Laura Jones
Hody, Cynthia		Mark Murray
		Jakana Thomas
		Tiffany Yi
Johnson, Arthur	POLI	Zenette Duffy
Johnson, Arthur	FULI	Zenette Dully
	-	
	-	
	-	
Psychology		
Anderson, Robert	PSYC	Uwem Eshietedoho
,		Heather Luttrell
Bediako, Shawn	PSYC	Cathryna Brown
Dodialo, olialini		Alexandra Chambers
		Edgar Sullivan
Catania, A. Charles	PSYC	Rich Goldman
Cheah, Charissa	PSYC	Animari Fermaint
orioun, orianooa		
Dahlquist, Lynnda		DeLeon L. Grav
	PSYC	DeLeon L. Gray Ketgael Gordon
- anquiot, Lynnou	PSYC	Ketgael Gordon
		Ketgael Gordon Melinda Edwards
Deluty, Robert	PSYC PSYC	Ketgael Gordon Melinda Edwards Dusti Gecz
		Ketgael Gordon Melinda Edwards Dusti Gecz Pankaj Kaushal
		Ketgael Gordon Melinda Edwards Dusti Gecz Pankaj Kaushal Wuya Lumeh
Deluty, Robert	PSYC	Ketgael Gordon Melinda Edwards Dusti Gecz Pankaj Kaushal Wuya Lumeh Tabassum Majid
		Ketgael Gordon Melinda Edwards Dusti Gecz Pankaj Kaushal Wuya Lumeh Tabassum Majid Jonathan Posner
Deluty, Robert Fox, Mary	PSYC PSYC	Ketgael Gordon Melinda Edwards Dusti Gecz Pankaj Kaushal Wuya Lumeh Tabassum Majid Jonathan Posner Marla Lazarus
Deluty, Robert	PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem
Deluty, Robert Fox, Mary Freiberg, Karen	PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich
Deluty, Robert Fox, Mary	PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount
Deluty, Robert Fox, Mary Freiberg, Karen Groninger, Lowell	PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert
Deluty, Robert Fox, Mary Freiberg, Karen Groninger, Lowell Maton, Kenneth	PSYC PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert         Matthew Sherman
Deluty, Robert Fox, Mary Freiberg, Karen Groninger, Lowell	PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert         Matthew Sherman         Netali Carmel
Deluty, Robert Fox, Mary Freiberg, Karen Groninger, Lowell Maton, Kenneth	PSYC PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert         Matthew Sherman         Netali Carmel         Rachel Steinhorn
Every Robert Fox, Mary Freiberg, Karen Groninger, Lowell Maton, Kenneth O'Brien, Eileen	PSYC PSYC PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert         Matthew Sherman         Netali Carmel         Rachel Steinhorn         Randy Wolfensberger
Deluty, Robert Fox, Mary Freiberg, Karen Groninger, Lowell Maton, Kenneth	PSYC PSYC PSYC PSYC PSYC PSYC	Ketgael Gordon         Melinda Edwards         Dusti Gecz         Pankaj Kaushal         Wuya Lumeh         Tabassum Majid         Jonathan Posner         Marla Lazarus         Jennifer Klem         Kiya Rich         Charles Blount         Stephen Lambert         Matthew Sherman         Netali Carmel         Rachel Steinhorn

Kramer, Ivan	PHYS	Heasley, Kathleen	Biophysics
Sparling, Lynn	PHYS	NessAiver, Eliana	Medical Imaging
Thorpe, Ian	PHYS	Heasley, Kathleen	Biophysics
Political Science			
Blake, William	POLI	Griffith, Wyatt	Criminal Justice
Davis, Jeffrey	POLI	Aslam, Amna	Social and Cultural Aspects of Crime
			Social Entrepreneurship
Forestiere, Carolyn	POLI	Hester, Mary	Arts Advocacy
Hagerty, Devin	POLI	Dewald, Yelena	International and Global Studies
		Fowler, Amy	Domestic Politics of Globalization in Contemporary China
		Lee, Miriam	Criminal Justice and Counter-Terrorism
		Fowler, Jamie	National Security Studies
		Joseph, Achsah	Genocide, Human Rights and International Diplomacy
Hinkle, Rachael	POLI	Bennaman, Meagan M.	
		Jain, Aastha	Criminology and Criminal Justice
Hody, Cynthia	POLI	Holte, Jessica	Criminal Justice
		Marshall, Albert	Public Policy and Media Arts
	_	Shinault, Oniesha	Criminal Justice
	_	Brach, Rebecca	Political and Social Globalization in the Middle East and North Africa
		Welkner, Nicole	International Intelligence and Cyber Security: China
Hussey, Laura	POLI	Smith, Kayla	Public Health Advocacy
		Harris, Robin	Community Development for Immigrant Populations
Johnson, Arthur	POLI	Rada, Rosa	Food Systems Policy
Starkey, Brigid	POLI	Quackenbush, Valerie	Middle Eastern Studies
		Trapani, Nicholas B.	Criminal Intelligence and National Security
		Majid, Asif	Global Peace Building and Conflict Management
Vetter, Lisa	POLI	Mercer, Jennifer	Women and Criminal Law
Psychology Abrams, Jasmine	PSYC	Funk, Karli	Physiological Psychology
Anderson, Robert	PSYC		Physiological Psychology
Anderson, Robert	P510	Kang, Yoo-Jin	Psychosocial and Cultural Perspectives on Violence
		Bollinger, Heather	Psychosocial Issues in Health Behaviors Physical and Psychological Therapy of Athletes
		Yap, Shane	
		Mulcahy, Shannon Offenbacher, Kaili	Sports Psychology and Marketing
Denny Debin	PSYC		Neuropsychology Neuroscience
Barry, Robin	PSYC	Chioma, Vivian	
Bediako, Shawn	P510	Zulfiqar, Urooj	Biopsychosocial Development in Pediatric Cancer Patients
		Daniel, Dana	Pediatric Health Psychology
Dredeku Anne	PSYC	Arias, Elizabeth	Pediatric Health Care
Brodsky, Anne	PSYC	Kazi, Nicole	Political and Cultural Aspects of International Development
Dahlquist, Lynnda	PSYC	Patel, Shyam	Pediatric Healthcare
	-	Kennedy, Joseph	Criminal Justice
		Leclercq, Lauren	Creative Arts for Children
	501/0	Lynott, Elizabeth	Pediatric Healthcare
Deluty, Robert	PSYC	Gecz, Dusti	Studies in Crisis Response for Emergency Professionals
Freiberg, Karen	PSYC	Massarelli, Roxanne	STEM Education and Inclusion
Connett Adi-	DOV/O	Allinder, Jason	Biopsychosocial Aspects of Sports Injuries
Garrett, Adia	PSYC	Speaks, Lillian	Criminal Justice
		Jacek, Danielle	Psychosocial Rehabilitation of Childhood Trauma
		Tinnirella, Jaime	A Comprehensive Approach to Health, Wellness, and Early Education
		Massey, Josh	Leadership Development and Social Entrepreneurship
		Huynh, Donna	Pediatric Health
Murphy, Christopher	PSYC	Blitz, Jessica	Criminal Justice
O'Brien, Eileen	PSYC	Destefano, Nicholas	Biopsychosocial Health
		Mizell, Marina	Pediatric Psychological Neurological Development
	1	Kadavil, Shana	Neuroscience

I	1	David Stuart
		Samuel Min
-		Joan Taylor
Sonnenschein, Susan	PSYC	Briana Palumbo
Connericoneini, edean	1010	Karen Tsambikos
Waldstein, Shari	PSYC	Justin Lingel
Waldstein, Shan	1010	
Religious Studies		
Allen, Henry	RLST	Justin Hanneken
Allen, Henry	nloi	Justin Hanneken
Casiala <i>nu</i>		
Sociology	COCY	Velezie Leek
Cohen, Jere Hewitt, Christopher	SOCY SOCY	Valerie Leek Paul Bertulis
Hewitt, Christopher	SUCY	
		Tzviel Blankchtein
		Dan Breslaw
	0001	Edgar Sullivan
Kelly-Moore, Jessica	SOCY	ReginaL. Hrybyk
		Ketgael Gordon
	0001	Robin Payne
Knapp, W. Roland	SOCY	Uwem Eshietedoho
Lottes, Ilsa	SOCY	Lauren Etheridge
		Louis Leibowitz
MacLennan, Jamie	SOCY	Heidi Brueckner
Morgan, Leslie	SOCY	Jill Bishop
		Wambui Kamiru
Pincus, Fred	SOCY	Vasanthi Abraham
Rothstein, William	SOCY	Emily Wang
		Zenette Duffy
San Antonio, Patricia	SOCY	Stephanie Meredith
Schumacher, John	SOCY	Cassandra Jenkins
		Stacey Edwards
		James Valentine
Seckin, Gul	SOCY	Samantha Bier
Stuart, Mary	SOCY	Elizabeth Finchman
		Jenifer Morse
Social Work	0014/1/	Deveels MaD
Okundaye, Joshua	SOWK	Beverly McDougall
		Sabrina Renzer
		Lea Sternbach
		Joan Taylor
		Teresa Hum
Theetre	1	
Theatre	TUTE	Edia Das sera
Kreizenbeck, Alan	THTR	Erin Pressman Austin Kidwell
McCully Sugar	титр	
McCully, Susan	THTR	Catherine Ichniowski
	1	Erin Pressman
		Daphne Gardner
		Jason Hoffman
	TUTE	Patrick Letterii
Zlotescu, Elena	THTR	Dana Greaves
		I

Quiton, Rami	PSYC	Patel, Himadri	Neuroscience
		Prasad, Priyanka	Neuroscience of Aging
		Hoff, Sharde	Neuropsychology
Sandhu, Harinder	PSYC	Stetyick, Alyson	Organizational Development
Schiffman, Jason	PSYC	Rosenberry, Daryl	Psycho-social Perspectives on Community Building
Sy, Jolene	PSYC	Justus, Kevin	Animal Behavior
Waldstein, Shari	PSYC	Correa, Chris-Anne	Neuropsychology with Statistical Applications
Warwick, Zoe	PSYC	Gerber, Adam	Neuropsychology
Religious Studies			
Sociology			
Andersen, Daniel	SOCY	Hartsky, Lauren	Emergency Care Management
Archibald, Sarah	SOCY	Griffith, Wyatt	Criminal Justice
		Holte, Jessica	Criminal Justice
		Bennaman, Meagan M.	Criminology
	0001	Jain, Aastha	Criminology and Criminal Justice
Cousin-Gossett, Nicole	SOCY	Lee, Miriam	Criminal Justice and Counter-Terrorism
Ekert, J. Kevin	SOCY	Harris, Robin	Community Development for Immigrant Populations
Hosler, Colleen	SOCY	Huynh, Donna	Pediatric Health
	0001	Pitkanen, Nicole	Approaches in Therapeutic Physical Functioning
Lottes, Ilsa	SOCY		Health Resources Development and Management
Morgan, Leslie	SOCY	Blitz, Jessica	Criminal Justice
Pinet-Peralta, Luis	SOCY	Donnellan, Kelsey	Community Health and Nutrition
Schumacher, John	SOCY	Bollinger, Heather	Psychosocial Issues in Health Behaviors
Tuer, Jeffrey	SOCY	Aslam, Amna	Social and Cultural Aspects of Crime
		-	
Social Work	-		
Demindenko, Michael	SOWK	Arias, Elizabeth	Pediatric Health Care
Okundaye, Joshua	SOWK	Mercer, Jennifer	Women and Criminal Law
		Ndome, Rosine	Health Literacy Promotion and Advocacy for an Immigrant Population
Tice, Carolyn	SOWK	Rosenberry, Daryl	Psycho-social Perspectives on Community Building
		Epps, Ryan	Community Arts Outreach
	1	Zamzow, Bryan	Music Education and Healing
	1		
Theatre	1		
Crocker, Temple	THTR	Columbus, Theresa	Performance Art and Creative Writing
Kreizenbeck, Alan	THTR	Kidwell, Austin W.	Dramaturgy
Mendelson, Adam	THTR	Keys, Melanie	Marketing
McCully, Susan	THTR	Calvin, Alexandra	Dramaturgy
Schraven, Greg	THTR	Goodrich, Daniel	Arts Management
	1		
;g			

Visual Arts		
Abraham, Guenet	VAAV	Maria McAllister
Bradley, Steve	VAAV	Jeremy Swan
Bradiey, Blove	,,,,,,	Nickole Halpine
Cazabon, Lynn	VAAV	Marquita Taylor
Cook, Cathy	VAAV	Daphne Gardner
, <i>j</i>		Andrea Sorensen Olivier
Durant, Mark	VAAV	Elizabeth Barr
Gardner, Symmes	VAAV	Alyssa Anderson
		Simonne Jones
Jacob, Preminda	VAAV	Chia-Hsin Hsueh
*		Dana Greaves
		Katherine Gagne
		Caitlyn Merwin
		Vinh (Nguyen) Thai
Mahoney, James	VAAV	Natalie Blank
		Melanie Hamons
Moren, Lisa	VAAV	Marquita Taylor
Smalls, James	VAAV	Jason Hoffman
-,		Shayna Robinson
Thompson, Calla	VAAV	Justine Acciani
( /		Robin Payne
Van der Stelt, Renee	VAAV	ReginaL. Hrybyk
Worden, Fred	VAAV	Shoma Kotwani
Yager, David	VAAV	Truc Nguyen
<b>Campus</b> Armor, Vivian	Alex Brown Centerfor Entrepreneurshi	Alex Broadwater
Lenue lennifer	p	Maahaka Dawatt
Lepus, Jennifer	University Health	Masheka Barrett
•	University Health Services	
•	University Health Services University Health	Masheka Barrett Alexandra Chambers
Rohrbach, Alison	University Health Services University Health Services	Alexandra Chambers
Rohrbach, Alison Taylor, Joby	University Health Services University Health Services Shriver Center	Alexandra Chambers Melanie Denischuk
Rohrbach, Alison	University Health Services University Health Services	Alexandra Chambers
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer
Rohrbach, Alison Taylor, Joby Baron, Kenneth Nolin, Michael	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer Udara Perera
Rohrbach, Alison Taylor, Joby Baron, Kenneth	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising Hilltop Institute	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer Udara Perera Randy Wolfensberger
Rohrbach, Alison Taylor, Joby Baron, Kenneth Nolin, Michael Brown, Charles	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising Hilltop Institute Athletics Instructional Systems	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer Udara Perera Randy Wolfensberger Jim Spamer
Rohrbach, Alison Taylor, Joby Baron, Kenneth Nolin, Michael Brown, Charles	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising Hilltop Institute Athletics Instructional Systems	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer Udara Perera Randy Wolfensberger Jim Spamer
Rohrbach, Alison Taylor, Joby Baron, Kenneth Nolin, Michael Brown, Charles	University Health Services University Health Services Shriver Center Office of Pre- Professional and Academic Advising Hilltop Institute Athletics Instructional Systems	Alexandra Chambers Melanie Denischuk Amanda Fefel April Nevitt Neil Haidorfer Maansi Raswant Segen Moges Tigue Tozer Udara Perera Randy Wolfensberger Jim Spamer

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Visual Arts	_		
Abraham, Guenet	VAAV	McAllister, Maria	Innovation in Design
Bell, Kelley	VAAV	Kimak, Emily	Integrative Arts
Bradley, Steven	VAAV	Columbus, Theresa	Performance Art and Creative Writing
Dradley, Oleven	VAAV	Fincher. Erin	Visual Communications in Medicine
Cazaban Lynn	VAAV	Bonfante, Robert	Visual and Environmental Studies
Cazabon, Lynn	VAAV		Photojournalism with a Focus on Social Issues
On all On the		Davila, Patricia	
Cook, Cathy	VAAV	Cantwell, Julia	Visual and Cultural Analysis of Media
Durant, Mark	VAAV	Queral, Luis	Story-centric Design for Web-Based Interactive Media
Grabill, Vin	VAAV	Brant, Lewis	Digital Media: Art with Technology
Jacob, Preminda	VAAV	Wesolowski, Joseph	Historic Preservation: Sense of Place
Kachadourian, Gary	VAAV	Wang, Hao	Medical Illustration
Silberg, Steven	VAAV	Hawkins, Samantha	Visual Research Methodology
		Ko, Phillip	Social Change: Photography and Journalism
Sturgeon, John	VAAV	Bell, Brian Y.	Entrepreneurial Film and Video
Worden, Fred	VAAV	Osazuwa, Christine	Music Journalism and Entrepreneurship
		Mauler, Steven	International Cinema
Other Offices on			
Campus			
Baron, Ken	Academic Advis	Proctor, Markus	Technology Entrepreneurship and Organizational Management
Behnemen, Cara	Hillel	Kahan, Samantha	Unity and Diversity in the American Jewish Community
,			
Casey, Barry	Faculty Develop	Montgomery, Ryan	Music Management
Forno, Richard	Cyber Security		Cyber Diplomacy
	cysel cooulity	r ton, ouy	o joor Diplomacy
Gardner, Symmes	CADVC	Epps, Ryan	Community Arts Outreach
Galulier, Symmes	CADVC	Ellerbrock, Adam	Music and Art Production
Classen David	Canaral Caura		
Gleason, David			Critical Thinking with Perspectives in Law
Glenn, Sarena		Schehr, Melanie	Nutrition Education and Communication
Haerian, Krystl	Health IT	Jeyaraju, Maniraj	Health Ethnography
Hemmerly, Ellen	UMBC Researc		Audio Engineering and Entrepreneurship
Hoffman, David	Student Life		Social Entrepreneurship
		Schwartz, Joseph	Social Sustainability
Lennon, Nick	StudentLife	McCarron, Jason	Studies in Ethical Leadership
Nolin, Michael	Hilltop	Frazer, Bernardine	Global and Sociocultural Issues in Health Care
		Slosser, Kira	Physical Therapy Studies with a U.S. Military Focus
Osazuwa, Christine	DPS	Schmulowitz, John	Music Entrepreneurship
		Ellerbrock, Adam	Music and Art Production
Taylor, Joby	Shriver	Majid, Asif	Global Peace Building and Conflict Management
Wardell, Jill		Kimery, Randy Jr.	Integrative Health and Entrepreneurship
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Off-Campus Advisors		
Smith, Joyce	Southwest Hospital	Neil Haidorfer
Ahmadu, Fumbai	University of Chicago	Jeneba Daramy
Schweitzer, Julie	MPRC	Andy Windsor
Vogel, Michael	MPRC	Wuya Lumeh
Hall, Nancy (off campus)		Jesse Austell
Dolk, Jann	UMBC	Jill Bishop
Dolk, Jann		Lauren Etheridge
Dolk, Jann		Melinda Edwards

Off-Campus Advisors			
Allert, Jeanne	The Samaritan	Jacek, Danielle	Psychosocial Rehabilitation of Childhood Trauma
Blankchtein, B.K.	Alum, Masada	Shinault, Oniesha	Criminal Justice
Gill, Douglas	UMCP	Gouliaeva, Ksenia	Wildlife Conservation
Greene, Avery	Alum, UMCP	Alon, Guy	Cyber Diplomacy
Jackson, Harvey Peralta, Ligia	Howard Comm UnivMD	Zamzow, Bryan Briscoe, Christina	Music Education and Healing Public Health in the Latino Community
Rabins, Peter	Hopkins	Karamsetty, Madhu	Neuroscience and Developmental Aging
Yuter, Alan	Bnai Israel	Kahan, Samantha	Unity and Diversity in the American Jewish Community

## TABLE 10: Undergraduate Student Enrollment & Degrees, Five-Year Trend Data

Enrollments and BA/BS Degrees in INDS

Source: DW.ReportFactStudentPlans; DW.ReportFactDegreePlans

Prepared by: UMBC Office of Institutional Research, 09/2017.

#### ENROLLMENTS Name of Degree Program Name Fall Total # of Student Annual %Change Average of Annua5-Year %Change 5-Year Enrollmen Primary Plans ΒA 2012 113 Interdisciplinary 104 Studies 2013 83 -26.50% 70 2014 93 12.00% 76 2015 85 -8.60% 73 2016 66 -22.40% -41.60% 88 58 -11.40% BS Interdisciplinary 2012 46 41 34 Studies 2013 -26.10% 31 40 37 2014 17.60% 2015 43 7.50% 38 45 37 2016 4.70% 0.90% -2.20% 41.6

DEGREES

Name of Degree	Program Name	Year	FY Total # of Deg An	inual %Change A	Ave, of Annual % 5	Year %Change 5 - Y	/ear Degree A Pri	mary Degrees
D.A.		0010.10						
BA	Interdisciplinary	2012-13	18					17
	Studies	2013-14	16	-11.10%				15
		2014-15	17	6.30%				16
		2015-16	9	-47.10%				9
		2016-17	16	77.80%	6.50%	-11.10%	15.2	15
BS	Interdisciplinary	2012-13	3					3
	Studies	2013-14	7	133.30%				7
		2014-15	5	-28.60%				5
		2015-16	7	40.00%				7
		2016-17	6	-14.30%	32.60%	100.00%	5.6	6

### Combination of BA+BS

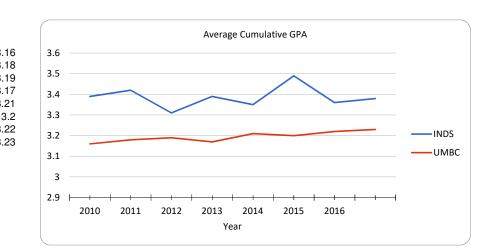
			EN	ROLLMENTS				
Name of Degre	ee Program Name	Fall	Total # of Student Anr	nual %Change Av	verage of Annua5-Y	ear %Change 5-Yea	<u>ır Enrollmen Prima</u>	iry Plans
BA, BS	Interdisciplinary	2012-13	159					145
	Studies	2013-14	117	-26.41%				101
		2014-15	133	13.68%				113
		2015-16	128	-3.76%				111
		2016-17	111	-13.28%	-7.44%	-30.19%	130	95

DEGRE	· E C

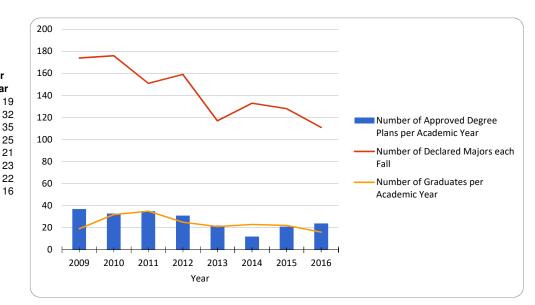
Name of Degree	e Program Name	Year	FY Total # of Deg Annu	ual %Change A	ve, of Annual % 5-Y	ear %Change 5 - Yea	ar Degree A Prima	ry Degrees
BA. BS	Interdisciplinary	2012-13	21					20
	Studies	2013-14	23	9.52%				22
		2014-15	22	-4.35%				21
		2015-16	16	-27.27%				16
		2016-17	22	37.50%	15.40%	4.76%	21	21

### Average Cumulative GPA

Source: REX R	eporting System	
INDS	UMBC	;
2009	3.39	3.
2010	3.42	3.
2011	3.31	3.
2012	3.39	3.
2013	3.35	3.
2014	3.49	3
2015	3.36	3.
2016	3.38	3.



#### INDS Majors, Approved Degree Plans, Graduates Source: INDS Departmental Data Number of Approved Degree Plans Number of Number of per Academic **Declared Majors Graduates per** Year each Fall Academic Year



#### Table 10A: Enrollments in Major 2012-2016, Five-Year Undergraduate Student Profile

Demographic Data of Students in INDS, BA/BS Source: DW.ReportFactStudentPlans Prepared by: UMBC Office of Institutional Research, 09/2017.

#### Interdisciplinary Studies, BA

Level:		Fall 2012				Fall 2013				Fall 2014	-			Fall 2015				Fall 2016		
	Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans	;
Status	-												1							
Full-Time	8	3	9	97	5	8	13	71	67	7	16	83		6	12	78	47	7	8	55
Part-Time	10		0	16		2	0	12			1	10		7	0	7	11		0	11
								. –												
Residency																				
Maryland	92	2	9	101	6	4	12	76	68	3	15	83		35	11	76	55	5	8	63
Non-Md	1:		0	12		6	1	7	8		2	10		8	1	9		3	0	3
Gender																				
Male	4	1	2	43	3	1	5	36	31		9	40		31	5	36	24	1	4	28
Female	6	3	7	70	3	9	8	47	45	5	8	53		12	7	49	34	1	4	38
Race																				
2 or More	:	3	0	3		2	2	4	2	2	2	4		5	1	6	2	2	1	3
Amer. Indian	(	D	0	0		0	0	0	(	)	0	0		0	0	0	2	2	0	2
Asian	1	1	2	13		7	1	8	13	3	1	14		8	2	10	7	7	2	9
Black	2	2	2	24	1	5	3	18	13	3	4	17		2	2	14	8	3	0	8
Hawaii/Pac	(	D	0	0		0	0	0	(	)	0	0		0	0	0	(	)	0	0
Hispanic		6	0	6		4	0	4	1		1	2		0	2	2	5	,	0	5
International		1	0	1		3	1	4	2	-	1	3		2	0	2	(	·	0	0
Not Specified White	5	3	0 5	3 63	3	2	0 6	2 43	( 45		1	1 52		0 16	0 5	0 51	34		0	0 39
vvnite	5	5	5	03	3	/	0	43	40	)	1	52		10	5	51	3.	•	5	39
Age																				
Under 18			0	1		0	0	0	2		1	3		2	0	2	1	I	0	1
18 - 19	34		4	38		5	6	21	27	7	5	32	2	23	2	25	11		4	15
20 - 21 22 - 24	44		3 2	47 18	3	0 5	4	34 17	27		9	36 12		25  4	9	34 15	29 10		4	33 10
22 - 24 25 - 29		3	2	10	1	5 4	2	5			1	12		6	0	61	10	5	0	10
30 - 39		3	0	3		2	0	2		2	0	2		1	0	1		)	0	0
40 - 49		1	0	1		2	0	2	1		0	1		0	0	0	1	l	0	1
50 - 59	· ·	1	0	1		1	0	1	3	3	0	3		2	0	2	(	)	0	0
60 - 64		1	0	1		1	0	1	(	)	0	0		0	0	0	1	l	0	1
65 and Over	(	J	0	0		0	0	0	(	)	0	0		0	0	0	(	J	U	0
Total	104	4	9	113	7	0	13	83	76	5	17	93	-	73	12	85	58	3	8	66

#### Table 10A: Enrollments in Major 2012-2016, Five-Year Undergraduate Student Profile Interdisciplinary Studies, BS

Level:		Fall 2012				Fall 2013				Fall 2014				Fall 2015				Fall 2016		
Bachelor's	Primary Plan	Add'l Plans	All Plans	F	Primary Plan	Add'l Plans	All Plans	Р	rimary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans	
Status																				
Full-Time		8	5	43	30	)	3	33	36		3	39	3	6	5	41	3	3	7	40
Part-Time		3	0	3	1		0	1	1		0	1		2	0	2		4	1	5
Residency																				
Maryland	3	5	5	40	29	)	3	32	31		3	34	3	4	4	38	3	2	7	39
Non-Md		6	0	6	2	2	0	2	6		0	6		4	1	5		5	1	6
Gender																				
Male	19	9	2	21	12	2	1	13	12		2	14	1	5	2	17	1	3	4	17
Female	2	2	3	25	19	)	2	21	25		1	26	2	3	3	26	2	4	4	28
Race																				
2 or More	. (	D	0	0	1		0	1	5		0	5		3	0	3		2	1	3
Amer. Indian		0	0	0	0	)	0	0	0		0	0		0	0	0		0	0	0
Asian	1(	D	1	11	7	,	0	7	7		1	8		9	2	11		7	1	8
Black		7	2	9	8	3	1	9	5		0	5		3	1	4		3	2	5
Hawaii/Pac	: (	D	0	0	0	)	0	0	0		0	0		0	0	0		0	0	0
Hispanic		1	0	1	1		0	1	3		1	4		3	1	4		3	1	4
International	l :	3	0	3	C	)	0	0	1		0	1		1	0	1		2	0	2

Not Specified	1	0	1	2	1	3	0	0	0	1	0	1	1	2	3
White	19	2	21	12	1	13	16	1	17	18	1	19	19	1	20
Age															
Under 18	1	2	3	1	0	1	2	0	2	1	0	1	0	0	0
18 - 19		2	20	14	0	14	10	1	11	11	2	13	11	2	13
20 - 21		1	17	9	3	12	18	1	19	17	1	18	14	4	18
22 - 24		0	2	6	0	6	4	1	5	7	2	9	10	2	12
25 - 29	1	0	1	1	0	1	2	0	2	2	0	2	1	0	1
30 - 39	2	0	2	0	0	0	1	0	1	0	0	0	1	0	1
40 - 49		0	1	0	0	0	0	0	0	0	0	0	0	0	0
50 - 59		0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64		0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 and Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	41	5	46	31	3	34	37	3	40	38	5	43	37	8	45

#### Table 10A: Enrollments in Major 2012-2016, Five-Year Undergraduate Student Profile Interdisciplinary Studies, BA+BS

Level:	1	Fall 2012				Fall 2013			Fall 2014				Fall 2015			1	Fall 2016		
Bachelor's	Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans	Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plans		Primary Plan	Add'l Plans	All Plar	IS
Status	í í											í í				í í			
Full-Time	12	6	14	140	88	: 1	6 10	4	103	19	122	10	2	17	119	8	0	15	95
Part-Time			0	19	13		0 1		10	1	11		Э	0	9		5	1	16
								-							-	-			
Residency																			
Maryland	12	7	14	141	93	1	5 10	8	99	18	117	9	9	15	114	8	7	15	102
Non-Md			0	18	8		1	9	14	2	16		2	2	14		8	1	9
		•	Ū				•		••	-			-	-			•	•	Ũ
Gender																			
Male	6	0	4	64	43		6 4	9	43	11	54	4	6	7	53	3	7	8	45
Female			10	95	58		ο 6	8	70	9	79			10	75		8	8	66
Race																			
2 or More		3	0	3	3		2	5	7	2	9	:	3	1	9		4	2	6
Amer. Indian		0	0	0	(		D	0	0	0	0		)	0	0		2	0	2
Asian	2	1	3	24	14		1 1	5	20	2	22	1	7	4	21	1	4	3	17
Black	2	9	4	33	23		4 2	7	18	4	22	1	5	3	18	1	1	2	13
Hawaii/Pac		0	0	0	(		D	0	0	0	0		)	0	0		0	0	0
Hispanic		7	0	7	Ę		D	5	4	2	6	:	3	3	6		8	1	9
International		4	0	4	3		1	4	3	1	4	:	3	0	3		2	0	2
Not Specified		4	0	4	4		1	5	0	1	1		1	0	1		1	2	3
White	7	7	7	84	49		7 5	6	61	8	69	6	4	6	70	5	3	6	59
Age																			
Under 18		2	2	4	1		0	1	4	1	5		3	0	3		1	0	1
18 - 19			6	58	29		6 3		37	6	43	3		4	38	2		6	28
20 - 21			4	64	39		7 4	-	45	10	55			10	52	4		8	51
22 - 24		8	2	20	21		2 2	3	15	2	17	2	1	3	24	2	0	2	22
25 - 29		4	0	4	5		1	6	5	1	6	1	3	0	8		6	0	6
30 - 39		5	0	5	2		0	2	3	0	3	· · · ·	1	0	1		1	0	1
40 - 49		2	0	2	2		0	2	1	0	1		)	0	0		1	0	1
50 - 59		1	0	1	1		0	1	3	0	3		2	0	2		0	0	0
60 - 64		1	0	1	1		0	1	0	0	0		)	0	0		1	0	1
65 and Over		0	0	0	(		D	0	0	0	0	'	)	0	0		0	0	0
Total	14	5	14	159	101	1	6 11	7	113	20	133	11	1	17	128	c	5	16	111

# Table 11: Number of Proposals Passed: Fall 2011–Spring 2017

		Source: INDS D	epartmental Data		
Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
September - 2	September - 2	September - 0	September - 3	September - 3	September - 3
October - 5	October - 2	October - 0	October - 3	October - 3	October - 0
November - 3	November - 3	November - 2	November - can	November - 4	November - 2
December - 7	December - 6	December - 2	December - 5	December - 5	December - 3
Total - 17	Total - 13	Total - 4	Total - 11	Total - 15	Total - 8
Spring 2012	Spring 2013	Spring 2014	Spring 2015	Spring 2016	Spring 2017
February - 2	February - 3	January - 1	February - 1	February - 4	February - 1
March - 4	March - 2	February - 2	March - 3	March - 0	March - 1
April - 4	April - 2	March - 2	April - 3	April - no Q	April - 3
May - 4	May - 2	April - 1	May - 3	May - 5	May - 7
Total - 14	Total - 9	May - 2 Total -	Total - 10	Total - 9	Total - 12
Total - 31	Total - 22	Total - 12	Total - 21	Total - 24	Total - 20

# Approved Degree Plans at the ISC Meetings

# Detailed Account at Each ISC Meeting

## Source: INDS Departmental Data

		Subr	nitted to ISC				Outcomes		
	Review	Re-Submit	New	Total Re	viewed Need Lette	r Submit	Approved	Again	Total Approved
Fall 2011									
September	r		2		2			2	2
Octobe	r		1	5	6		1	5	5
Novembe	r		2	2	4		1	3	3
December	r		1	7	8		1	7	7
Spring 2012									
February	/		2	1	3		1	2	2
March	ı			5			1	4	4
Apri	1		1	5	6		2	4	4
May	/		3	2	5		1	4	4
									TOTAL AY - 31
Fall 2012									
September			2		2			2	2
Octobe			1	3	4		2	2	2
Novembe			2	1 8	3 8		0	3	3
December Spring 2013	r			8	8		2	6	6
February	/		2	2	4		1	3	3
March	ı		1	2	3		1	2	2
Apri			1	1	2			2	2
May	/			4	4		2	2	2

								TOTAL AY - 22
Fall 2013								0
September October			1	1		1		0
November		1	2	3		1	2	2
December		1	4	5		3	2	2
Spring 2014		· ·	4	5		5	2	2
January			1	1			1	1
February		2	1	3		1	2	2
March		-	2	2		·	2	2
April			2	2		1	1	1
May		2	3	5		3	2	2
								TOTAL AY - 12
Fall 2014								
September		1	3			1	3	3
October		2	2	4		1	3	3
November	(cancelled - power)							
December		1	4	5			5	5
Spring 2015								
February			3	3	1	1	1	1
March	1	2	1	4	1		3	3
April			4	4		1	3	3
May	2	1	4	7	2	1	3	1 3
								TOTAL AY - 21
Fall 2015							-	
September	2	1	1	4	1		3	3
October			3	3		0	3	3
November December	1	0	6 4	7 7		3 2	4 5	4 5
Spring 2016	I	2	4	7		2	Э	5
Spring 2016 February		1	5	e		2	4	1
March		1	5	6	1	2	4	4
	(no quorum, rec made)	I		'	I			0
May		1	6	8	1	2	5	5
way		I	0	0	I	2	0	TOTAL AY - 24
Fall 2016								
September	2	1		3			3	3
October		1	1	2	2		-	0
November	2		2	4	1	1	2	2
December	1		3	4		1	3	3
Spring 2017								
February		2	2	4	1	2	1	1
March	1	1	3	5	3	1	1	1
April			3	5		2	3	3
May	1	4	4	9		1	7	1 7
								TOTAL AY - 20

# Table 12: Degree Plan Titles, September 2010-May 2017

All INDS degree plans approved by the ISC

Source: INDS Departmental Data

Name	Degree Plan Title	Advisor1	Department	Advisor2	Department	Program Advisor	Date Approved
Becker, Alyson	Intercultural Communication and East Asian Studies	Oakes, Julie	HIST	McCray, Stanley	MLLI	SAUTER	9/17/2010
Daniel, Dana	Pediatric Health Psychology	Majeski, Robin	Erickson	Bediako, Shawn	PSYC	MCALPINE	9/17/2010
McDaniels, Amie	Urban Elementary Environmental Education	Blunck, Susan	EDUC	Bennett, Sari	GES	MCALPINE	9/17/2010
Ponter, Evan	Music Entrepreneurship	Cella, Lisa	MUSC	Armor, Vivian	Alex Brown	MCALPINE	9/17/2010
Walker, Laura	Protecting Human Systems in Extreme Environments	George, Ian	PHYS	Spence, Anne	MENG	MCALPINE	9/17/2010
Feasley, A. Eliana	Cognitive Science	desJardins, Marie	CMSC	Ealick, Greg	PHIL	MCALPINE	10/15/2010
Fowler, Amy	Domestic Politics of Globalization in Contemporary	Hagerty, Devin	POLI	Yip, Ka-che	HIST	SAUTER	10/15/2010
Packianathan, Jefreena	Human-Centered Computing	Kuber, Ravi	IS	Nicholas, Charles	CMSC	SAUTER	10/15/2010
Destefano, Nicholas	Biopsychosocial Health	O'Brien, Eileen	PSYC	Claassen, Lark	BIOL	SAUTER	11/19/2010
Epps, Ryan	Community Arts Outreach	Tice, Carolyn	SOWK	Gardner, Symmes	CADVC	MCALPINE	11/19/2010
Heasley, Kathleen	Biophysics	Thorpe, Ian	PHYS	Kramer, Ivan	PHYS	SAUTER	11/19/2010
Hrybyk, Rosalie	Musical Theater Education	Yoshioka, Airi	MUSC	Williams, Vickie	EDUC	MCALPINE	11/19/2010
Kazi, Nicole	Political and Cultural Aspects of International		MLLI		PSYC	SAUTER	11/19/2010
,	·	McCray, Stanley		Brodsky, Anne			
Tinnirella, Jaime	A Comprehensive Approach to Health, Wellness, and	Scully, Patricia	EDUC	Garrett, Adia	PSYC	SAUTER	11/19/2010
Brach, Rebecca	Political and Social Globalization in the Middle East and	Hody, Cynthia	POLI	Takacs, Wendy	ECON	SAUTER	12/17/2010
Schwartz, Joseph	Social Sustainability	Hoffman, David		McConnell, Virgina	ECON	LA NOUE	12/17/2010
Trapani, Nicholas B.	Criminal Intelligence and National Security	Nicholas, Charles	EENG	Starkey, Brigid	POLI	MCALPINE	12/17/2010
Frazer, Bernardine	Global and Sociocultural Issues in Health Care	Nolin, Michael	Hilltop	Caruso, Steven	BIOL	SAUTER	2/18/2011
Majid, Asif	Global Peace Building and Conflict Management	Starkey, Brigid	POLI	Taylor, Joby	Shriver	MCALPINE	2/18/2011
McCarron, Jason	Studies in Ethical Leadership	Lennon, Nick	StudentLife	Wilson, Richard	PHIL	SAUTER	2/18/2011
Flather, Brittany	Information and Digital Media Management	Snyder, Donald	MCS	Sadler, Patricia	IS	SAUTER	3/18/2011
Perdue, Courtney	Media Management and Music Performance	Cella, Lisa	MUSC	Armor, Vivian	Alex Brown	MCALPINE	3/18/2011
Fincher, Erin	Visual Communications in Medicine	Robinson, Phyllis	BIOL	Bradley, Stephen	VAAV	SAUTER	4/15/2011
Harris, Robin	Community Development for Immigrant Populations	Ekert, J. Kevin	SOCY	Hussey, Laura	POLI	MCALPINE	4/15/2011
Kim, Eunhyuk (Joseph)	Social Entrepreneurship	Davis, Jeffrey	POLI	Hoffman, David	Student Life	MCALPINE	4/15/2011
Aslam, Amna	Social and Cultural Aspects of Crime	Davis, Jeffrey	POLI	Tuer, Jeffrey	SOCY	MCALPINE	5/20/2011
Kahan, Samantha	Unity and Diversity in the American Jewish Community	Behnemen, Cara	Hillel	Yuter, Alan	Bnai Israel	SAUTER	5/20/2011
Louis, Matthania	After-School Education	Bryan, Kathy	AMST	Oliva, Linda	EDUC	MCALPINE	5/20/2011
NessAiver, Eliana	Medical Imaging	Sparling, Lynn	PHYS	Gullapalli, Rao	Univ of MD	SAUTER	5/20/2011
Patel, Shyam	Pediatric Healthcare	Eisenmann, David	BIOL	Dahlquist, Lynnda	PSYC	SAUTER	5/20/2011
Pesci, Michael	Management and Communications in the Sports Industry	Coates, Dennis	ECON	Armor, Vivian	Alex Brown	SAUTER	5/20/2011
Sasi, Greeshma	Neuroscience	Leupen, Sarah	BIOL	Anderson, Robert	PSYC	SAUTER	5/20/2011
Schneider, Elizabeth	Science Writing	George, Ian	PHYS	Shivnan, Sally	ENGL	MCALPINE	5/20/2011
Allinder, Jason	Biopsychosocial Aspects of Sports Injuries	Freiberg, Karen	PSYC	Caruso, Steven	BIOL	MCALPINE	9/16/2011
Leclercq, Lauren	Creative Arts for Children	Gwiazda, Piotr	ENGL	Dahlquist, Lynnda	PSYC	SAUTER	9/16/2011
Currie, Sandra	Integrative Health	Miller, Stephen	BIOL	Majeski, Robin	Erickson	MCALPINE	10/21/2011
Epstein, Rachelle	Bio-Cultural Hominid Anthropology	Messinger, Seth	ANTH	Wagner, Cynthia	BIOL	FREELAND	10/21/2011
Jacek, Danielle Pitkanen, Nicole	Psychosocial Rehabilitation of Childhood Trauma Approaches in Therapeutic Physical Functioning	Garrett, Adia Majeski, Robin	PSYC Erickson	Allert, Jeanne Hosler, Colleen	The Samaritan V SOCY	SAUTER	10/21/2011 10/21/2011
Awosika, Ladi	Music Management and Performance	Cella, Lisa	MUSC	McCray, Stanley	MLLI	MCALPINE	11/18/2011

Nicholson, Eric	Sustainable Practices in Management	McConnell, Virgina	ECON	Sadler, Patricia	IS	SAUTER	11/18/2011
Gerber, Adam	Neuropsychology	Brewster, Rachel	BIOL	Warwick, Zoe	PSYC	MCALPINE	12/16/2011
Ko, Phillip	Social Change: Photography and Journalism	Corbett, Christopher	ENGL	Silberg, Steven	VAAV	MCALPINE	12/16/2011
Lynott, Elizabeth	Pediatric Healthcare	Dahlquist, Lynnda	PSYC	Gaiano-Starz, Michelle	BIOL	SAUTER	12/16/2011
Magleby, Kristina	Pre-Physical Therapy, Psychology and Spanish	O'Brien, Eileen	PSYC	Val, Adrianna	MLLI	SAUTER	12/16/2011
Welkner, Nicole	International Intelligence and Cyber Security: China	Hody, Cynthia	POLI	Yoon, Kyung-Eun	MLL	MCALPINE	12/16/2011
Zurkowski, Michael	Engineering Education	Spence, Anne	MECH	Singer, Jonathan	EDUC	MCALPINE	12/16/2011
Ndome, Rosine	Health Literacy Promotion and Advocacy for an	Okundaye, Joshua	SOWK	Poggio, Sara	MLLI	SAUTER	2/17/2012
	Immigrant Population	· · · · · · · · · · · · · · · · · · ·		- 33 - ,			
Yoncha, Danielle	Environmental Science Education	Lansing, David	GES	Williams, Vickie	EDUC	SAUTER	2/17/2012
Correa, Chris-Anne	Neuropsychology with Statistical Applications	Waldstein, Shari	PSYC	Leupen, Sarah	BIOL	SAUTER	3/16/2012
Fowler, Jamie	National Security Studies	Hagerty, Devin	POLI	Oyen, Meredith	HIST	SAUTER	3/16/2012
Naszkiewicz, Maciej	Intercultural Entrepreneurship	Gindling, Tim	ECON	Poggio, Sara	MLLI	MCALPINE	3/16/2012
Rosenbluth, Tali	Pediatric Physical Therapy	Tracy, Allison	CHEM	Majeski, Robin	AGNG	MCALPINE	3/16/2012
Hester, Mary	Arts Advocacy	Forestiere, Carolyn	POLI	Hamby, Doug	DANCE	SAUTER	4/20/2012
Johnson, Cory	The Politics of Foreign Aid in Sub-Saharan Africa	Chuku, Gloria	AFST	Taylor, Joby	Shriver	MCALPINE	4/20/2012
Kadavil, Shana	Neuroscience	Obrien, Eileen	PSYC	Leupen, Sarah	BIOL	SAUTER	4/20/2012
Ohiri, Joyce	Bioethics in the Fields of GMO & Biotechnology	Gierasch, Tiffany	CHEM	Wilson, Richard	PHIL	MCALPINE	4/20/2012
Brant, Lewis	Digital Media: Art with Technology	Grabill, Vin	VAAV	Rubin, Anna	MUSC	MCALPINE	5/18/2012
Lee, Miriam	Criminal Justice and Counter-Terrorism	Hagerty, Devin	POLI	Cousin-Gossett, Nicol	SOCY	SAUTER	5/18/2012
Marshall, Albert	Public Policy and Media Arts	Hody, Cynthia	POLI	Oakes, Julie	HIST	MCALPINE	5/18/2012
Meiser, Miriam Noelle	Missionary Medicine and Perspectives on Healing	Wilson, Richard	PHIL	Rubenstein, Robert	ANTH	MCALPINE	5/18/2012
Huynh, Donna	Pediatric Health	Garrett, Adia	PSYC	Hosler, Colleen	SOCY	SAUTER	9/21/2012
Quackenbush, Valerie	Middle Eastern Studies	Starkey, Brigid	POLI	Oven, Meredith	HIST	MCALPINE	9/21/2012
Cook, Dylan J.	Social Perspectives on Health Care	Nolin, Michael	Hilltop	Stuart, Mary	HAPP	MCALPINE	10/19/2012
Hawkins, Samantha	Visual Research Methodology	Messinger, Seth	ANTH	Silberg, Steven	Visual Arts	SAUTER	10/19/2012
Massey, Josh	Leadership Development and Social Entrepreneurship	Garrett, Adia	PSYC	Mason, Gib	ENGR	MCALPINE	11/16/2012
Maxwell, Simon	Bioethics in the Fields of GMO & Biotechnology	Miller, Stephen	BIOL	Thomas, James	PHIL	MCALPINE	11/16/2012
Queral, Luis	Story-centric Design for Web-Based Interactive Media	Durant, Mark	VAAV	Norcio, Anthony	IS	MCALPINE	11/16/2012
Blank, Shayna	Feminist Perspectives on the Literary Arts	Pekarse, Nicole	ENGL	Bhatt, Amy	GWST	SAUTER	12/14/2012
Chioma, Vivian	Neuroscience	Barry, Robin	PSYC	Gierasch, Tiffany	CHEM	MCALPINE	12/14/2012
Chou, Amy	Entrepreneurship in Alternative Medicine	Yip, Ka-Che	HIST	Ryan, Natasha	INDS	SAUTER	12/14/2012
Mauler, Steven	International Cinema	Worden, Frederic	VPA	Bazgan, Nicoleta	MLLI	SAUTER	12/14/2012
Speaks, Lillian	Criminal Justice	Garrett, Adia	PSYC	Wrigley, Jill	INDS	SAUTER	12/14/2012
Vyas, Suraj	Water Resource Management and Policy	Holland, Margaret	GES	Blaney, Lee	ENGR	SAUTER	12/14/2012
Goles, Jillian G.	Pediatric Health	Stuart, Mary	HAPP	Fleischmann, Esther	BIOL	MCALPINE	2/15/2013
Kennedy, Joseph	Criminal Justice	Pekarske, Nicole	ENGL	Dahlquist, Lynnda	PSYC	MCALPINE	2/15/2013
Tanaka, Yohka	Social Entrepreneurship	Bennett, Sari	GES	Wrigley, Jill	INDS	SAUTER	2/15/2013
Kelly, Rachel	Biopsychosocial Approaches to Health	Caruso, Steven	BIOL	Ronch, Judah	Erickson	MCALPINE	3/15/2013
Mulcahy, Shannon	Sports Psychology and Marketing	Moffitt, Kimberly	AMST	Anderson, Robert	PSYC	MCALPINE	3/15/2013
Kelbaugh III, Michael K.	Afterschool Education through the Performing Arts	Mabe, Mitzi	ENGL	Turner, Rita	AMST	MCALPINE	4/19/2013
McDougall, Jonathan	Science Writing	Holland, Maggie	GES	Sneeringer, Holly	ENGL	MCALPINE	4/19/2013
Kang, Yoo-Jin	Psychosocial and Cultural Perspectives on Violence	Anderson, Robert	PSYC	Chapin, Bambi	ANTH	MCALPINE	5/17/2013
Kimery, Randy Jr.	Integrative Health and Entrepreneurship	Wardell, Jill	Human Resource	Leupen, Sarah	BIOL	WRIGLEY	5/17/2013
Jain, Aastha	Criminology and Criminal Justice	Hinkle, Rachael	POLI	Archibald, Sarah	SOCY	SAUTER	10/18/2013
Hoff, Sharde	Neuropsychology	Quiton, Raimi	PSYC	Ronch, Judah	Erickson	BROWN	11/15/2013
Bennaman, Meagan M.	Criminology	Hinkle, Rachael	POLI	Archibald, Sarah	SOCY	WRIGLEY	12/13/2013
Camacho, Andres	Entrepreneurship and Digital Communication	Mason, Gib	ENTR	Burgess, Helen	ENGL	MCALPINE	12/13/2013
Donnellan, Kelsey	Community Health and Nutrition	Pinet-Peralta, Luis	SOCY	Fleischmann, Esther	BIOL	WRIGLEY	1/24/2014
Karamsetty, Madhu	Neuroscience and Developmental Aging	Ronch, Judah	AGNG	Rabins, Peter	Hopkins	MCALPINE	2/21/2014
Keys, Melanie	Marketing	Mendelson, Adam	THTR	Roogow, Irving	MGMT	MCALPINE	2/21/2014
Prasad, Priyanka	Neuroscience of Aging	Quiton, Raimi	PSYC	Majeski, Robin	AGNG	SAUTER	3/14/2014

Riggins, Shannon	Biomedical Sciences in Health Policy	Pinet-Peralta, Luis	HAPP	Freeland, Stephen	INDS	WRIGLEY	3/14/2014
Grant, Chad	Integrated Marketing Communications	Snyder, Donald	MCS	Eagle, Paul	MCS	WRIGLEY	4/18/2014
Offenbacher, Kaili	Neuropsychology	Miller, Stephen	BIOL	Anderson, Robert	PSYC	MCALPINE	5/16/2014
Seu, Michelle	Human Aesthetics	Wagner, Cynthia	BIOL	Picciuto, Elizabeth	PHIL	MCALPINE	5/16/2014
Brightman, Julianna	Food System Studies	Holland, Maggie	GES	Turner, Rita	AMST	BROWN	9/19/2014
Rosenberry, Daryl	Psycho-social Perspectives on Community Building	Tice, Carolyn	SOWK	Schiffman, Jason	PSYC	WRIGLEY	9/19/2014
Schmulowitz, John	Music Entrepreneurship	Mason, Gib	ENTR	Osazuwa, Christine	DPS	MCALPINE	9/19/2014
Freitag, Adam	Ludology	Shin, Joan Kang	EDUC	Thomas, James	PHIL	MCALPINE	10/24/2014
Goodrich, Daniel	Arts Management	Cella, Lisa	MUSC	Schraven, Greg	THTR	MCALPINE	10/24/2014
Shinault, Oniesha	Criminal Justice	Blankchtein, B.K.	Alum	Hody, Cynthia	POLI	MCALPINE	10/24/2014
Cook, Tiffany	Engaging Young Female Students in Mathematics and	Tighe, Bonny	MATH	Blunck, Susan	EDUC	SAUTER	12/19/2014
	the Sciences through Elementary Education			Branon, ouoan		0/10/12/1	,
Proctor, Markus	Technology Entrepreneurship and Organizational	Armor, Vivian	ENTR	Baron, Ken	Academic Advisi	MCAL PINE	12/19/2014
	Management			Dalon, non			,
Vanik, Paul	Biomedical Science and Healthcare Systems	Majeski, Robin	AGNG	Johnson, Barney	HIST	BROWN	12/19/2014
Venero, Sophia	Community Health and Nutrition	Wagner, Cynthia	BIOL	Canham, Rhonda	HAPP	BROWN	12/19/2014
Zamzow, Bryan	Music Education and Healing	Tice, Carolyn	SOWK	Jackson, Harvey	Howard Comm C		12/19/2014
Mizell, Marina	Pediatric Psychological Neurological Development	Eisenmann, David	BIOL	O'Brien, Eileen	PSYC	SAUTER	2/20/2015
Wang, Hao	Medical Illustration		VAAV	Omland, Kevin	BIOL	FREELAND	2/20/2015
Ellerbrock, Adam	Music and Art Production	Osazuwa, Christine		Gardner, Symmes	CADVC	MCALPINE	3/27/2015
Patel, Himadri	Neuroscience	Quiton, Rami	PSYC	Starz-Gaiano, Michelle		SAUTER	3/27/2015
Stetyick, Alyson	Organizational Development	Dasgupta, Nandita	ECON	Sandhu, Harinder	PSYC	SAUTER	3/27/2015
Berger, Brendan	Educational Software Development		MATH	Komlodi, Anita	IS	MCALPINE	4/17/2015
Miller, Sarah	Global Perspectives in Documentary Photography	Veasey-Cullors, Colle		Starkey, Brigid	POLI	FREELAND	4/17/2015
Starck, Andrew	Engineering Design and Management	Rothman, Neil	MECH	McAlpine, Steven	INDS	BROWN	4/17/2015
Honick, Chana	Science Communication through Visual Art	Gardner, Symmes	CADVC	Arnold, Bradley	CHEM	BROWN	5/15/2015
Opitz. Allison	Science Communication Infough Visual Art	Miller, Stephen	BIOL	Rudacille, Deborah	ENGL	SAUTER	5/15/2015
Paul, Neena	Computational Education	Bourne, Barbara	EDUC	Kurland, Sharyn	CMSC	SAUTER	5/15/2015
Scharfenberg, Eric	Entertainment Engineering	Bell, Cristian	THTR	Rothman, Neil	MECH	MCALPINE	5/15/2015
Griffith, Wyatt	Criminal Justice	Blake, William	POLI	Archibald, Sarah	SOCY	MCALPINE	10/16/2015
Rada, Rosa	Food Systems Policy	Johnson, Arthur	POLI	Lansing, David	GES	BROWN	10/16/2015
Schehr, Melanie	Nutrition Education and Communication	Glenn, Sarena	Campus Dieticiar		EDUC	BROWN	10/16/2015
Fernando, Nimasha	Intercultural Health	Chapin, Bambi	ANTH	Gulamali-Majid, Fizza	INDS	BROWN	11/20/2015
Jeyaraju, Maniraj	Health Ethnography	Chard, Sarah	ANTH	Haerian, Krystl	Health IT	FREELAND	11/20/2015
Schwarzenberg, Erik	Health and Wellness Entrepreneurship	Mason, Gib	ENTR	Leupen, Sarah	BIOL	MCALPINE	11/20/2015
Schwarzenberg, Enk Simmons, Jazmin	Culturally Responsive Techniques in Urban Math	Tighe, Bonny	MATH	Sanders, Mavis	EDUC	SAUTER	11/20/2015
Simmons, Jazmin	Education	ngne, Bonny	MATH	Sanders, Mavis	EDUC	SAUTER	11/20/2015
Alon, Guy	Cyber Diplomacy	Forno, Richard	Cyber Security	Greene, Avery	UMCP	MCALPINE	12/18/2015
DiNardo, Stephen	Brand Development	Coates, Dennis	ECON	Seidel, Zachary	MCS	SAUTER	12/18/2015
Mortimer, Heather	Museum Education and Exhibit Development	Abbott, Sandra	CADVC	Rivkin, Mary	EDUC	MCALPINE	12/18/2015
Salib, Gabrielle		,	CADVC	Hurst, Amy	IS	SAUTER	12/18/2015
	Human-Centered Computing	desJardins, Marie Thomas, James	PHIL	Archibald, Sarah	SOCY	SAUTER	2/19/2015
Haugen, Taiki	Criminal Justice	,					
	Patient-focused Neurology	Ronch, Judah		Koenig, Marcie	Copper Ridge	FREELAND	2/19/2016
Justus, Kevin	Animal Behavior	Sy, Jolene	PSYC	Mendelson, Tamra	BIOL	FREELAND	2/19/2016
Lilly, Kayla	Event Management	Armor, Vivian	ENTR EDUC	Patton, Elizabeth	MCS GES		2/19/2016
Alban, Michelle	Environmental Science in an Elementary Classroom	Blunck, Susan		Aufseeser, Dena		SAUTER	5/13/2016
Holte, Jessica	Criminal Justice	Hody, Cynthia	POLI	Archibald, Sarah	SOCY	SAUTER	5/13/2016
Holtzman, Zachary	Interactive Game Design	Varlack, Chris	ENGL	Mentis, Helena	IS CSEE		5/13/2016
NessAvier, Tziona	Neurotech Engineering	Quiton, Raimi	PSYC	LaBerge, Charles		MCALPINE	5/13/2016
Funk, Karli	Physiological Psychology	Abrams, Jasmine	PSYC	Hughes, Jennifer	BIOL	SAUTER	9/16/2016
Saloka, Elizabeth	Gender Equality in Computing	Benvenga, Michelle	GWST	Branham, Stacy	IS	SAUTER	9/16/2016
Smith, Kayla	Public Health Advocacy	Hussey, Laura	POLI	Varlack, Chris	ENGL	SAUTER	9/16/2016
St. Martin, Brooke	Integrative Physical Rehabilitation	Tracy, Alison	CHEM	Abrams, Jasmine	PSYC	SAUTER	11/18/2016

Wertlieb, Brendan J	Music and Social Entrepreneurship	Rubin, Anna	MUSC	Mason, Gib	ENTR	MCALPINE	11/18/2016
Butrim, Richard	Disaster Management	Polk, Dwight	EHS	School, Joseph	GES	MCALPINE	12/16/2016
Hardy, Kathryn	Immigration Law and Policy	Jani, Jayshree	SOWK	Hussey, Laura	POLI	SAUTER	12/16/2016
Mahmood, Fabiha	Security and Counterterrorism Studies	Aslam, Amna	InterPol	Hagerty, Devin	POLI	BROWN	12/16/2016
Griffin, Ethan	Urban Systems Design	Gardner, Symmes	VAAV	Korossy, Lazlo	POLI	MCALPINE	2/17/2017
Bain, Surovi	International Human Rights Law	Davis, Jeffrey	POLI	Hoye, Bobby	Asst Univ Counse	MCALPINE	3/17/2017
Aravindan, Nandini	Systems Neuroscience	Lin, Weihong	BIOL	Tamashiro, Kellie	JHU	SAUTER	4/21/2017
Brocious, Tyler	Stress on Emergency Health Professionals	Polk, Dwight	EHS	O'Brien, Eileen	PSYC	MCALPINE	4/21/2017
Koenig, Madison	Innovative Business Management	Rozanc, Gary	VAAV	Mason, Gib	ENTR	SAUTER	4/21/2017
Getachew, Alex	Arts Integration and Experiential Learning	Williams, Vickie	EDUC	Moffitt, Kimberly	AMST	MCALPINE	5/19/2017
Murray, Zachary	Design Engineering	Slaughter, Gymama	CMPE	Rothman, Neil	MECH	SAUTER	5/19/2017
Nixon, Drue	Graphic Storytelling and Publishing	Musgrove, Derek	HIST	Varlack, Christopher	ENGL	SAUTER	5/19/2017
Prakash, Krithika	Neurogenetics	Quiton, Raimi	PSYC	Eisenmann, David	BIOL	SAUTER	5/19/2017
Roa, Christopher	Music Technology and Social Entrepreneurship	Wonneberger, Alan	MUSC	Mason, Gib	ENTR	MCALPINE	5/19/2017
Speck, Christopher	Cybersecurity and Counterterrorism	Montgomery, Brian	ALANOUE	Hargerty, Devin	POLI	MCALPINE	5/19/2017
Strong, Jasmine	Visual Arts and Multicultural Therapy	Jani, Jayshree	SOWK	Sto. Domingo, Mario	PSYC	SAUTER	5/19/2017

# Table 13: Capstone Project Titles: Fall 2010-Spring 2017

All Capstone Project Titles for INDS Students

Source: INDS Departmental Data

Semester	Student	Capstone Project Title	INDS Degree
Fall 2010	Duracka, Juraj	Student Registration and Identification of English Language Learners in Harford County Public Schools	Cultural and Linguistic Studies within the Educational Environment
Fall 2010	Gouliaeva, Ksenia	Conservation of the Red Wolf	Wildlife Conservation
Fall 2010	Carmack, Paul	Real-Time Interaction Technology Integration in the Music Industry	Management and Music Technology Development
Fall 2010	Schroeder, Gregory	Cultural Understanding through Explorations of Music: Getting Along	Music Composition and World Cultures
Fall 2010	Bonfante, Robert	Establishment of the Chesapeake Bay Watershed Preserve	Visual and Environmental Studies
Fall 2010	Davila, Patricia	Limapi Andes Runakuna: A Look at Andean Identity in Lima, Peru	Photojournalism with a Focus on Social Issues
Fall 2010	Slosser, Kira	Revisiting the FM 20-21: Using Physical Therapy Concepts to Improve the Army Physical Training Regulations	Physical Therapy Studies with a U.S. Military Focus
Fall 2010	Page, Amanda	Preventing ACL Tears in Female Athletes	Sports Health and American Culture
Fall 2010	Blevins, Jeanie	The Zimbabwe Crises: Invetigating the Effectiveness of Development Agendas in Strengthening Local Communities	Social Issues in sub-Saharan Africa
Spring 2011	Briscoe, Christina	Adolescent Mothers in a Quilombo Community: Praia Grande, Brazil	Public Health in the Latino Community
Spring 2011	Zulfiqar, Urooj	The Biological and Psychological Effects of Leukemia on Children and their Families	Biopsychosocial Development in Pediatric Cancer Patients
Spring 2011	Isberg, Allison	Historical Narration and the Hansome Hansards	Medieval Linguistics
Spring 2011	Calvin, Alexandra	Dramaturging The Basset Table for a Modern Audience	Dramaturgy
Spring 2011	Viola, Donna	Life on 'Mars': Endolithic Biodiversity in a Terrestrial Analog	Astrobiology
Spring 2011	Columbus, Theresa	Performance Art Serious Life	Performance Art and Creative Writing
Spring 2011	Massarelli, Roxanne	Designing Mathematics: An Effective Approach?	STEM Education and Inclusion
Spring 2011	Godwin, Rebecca	The Sustainable Design and Practices of New Meadowlands Stadium and Cowboys Stadium	Sports and Media Management
Spring 2011	Blitz, Jessica	Reoffending in Society	Criminal Justice
Spring 2011	Wesolowski, Joseph	Historic Preservation: Developing Sense of Place on the University of Maryland Baltimore County Campus	Historic Preservation: Sense of Place
Spring 2011	York, Michael	Audio Engineering and Entrepreneurship: Integrating Two Fields of Study into a Business Venture	Audio Engineering and Entrepreneurship
Spring 2011	Bollinger, Heather	Smoking: Modifications in a Negative Health Behavior	Psychosocial Issues in Health Behaviors
Spring 2011	Osazuwa, Christine	Always Wanting More: Access, Entitlement and Expectations of Popular Music Bands in the Age of Social Media	Music Journalism and Entrepreneurship
Spring 2011	Cantwell, Julia	Play like a Girl	Visual and Cultural Analysis of Media
Spring 2011	Yap, Shane	Psychological and Sociological Causes of Shoulder Injuries in Elite Junior Tennis Players	Physical and Psychological Therapy of Athletes
Spring 2011	Hartsky, Lauren	Caring Confrontations: Re-establishing Adaptive Crisis Transitions in Health Care Moving to Water: Illuminating the Common Ground between Dance and	Emergency Care Management
Spring 2011	Kimak, Emily	Daily Water Use	Integrative Arts

1	1	Understanding and Managing Musical Worship: An Interdisciplinary	1
Spring 2011	Montgomery, Ryan	Approach	Music Management
Spring 2011	Diehl, Matthew	YouTube, Value, and the Hybrid Economy	Entrepreneurship in Media
Spring 2011	Kline, Jessica	Intercultural Competence in an Elementary Classroom	Elementary Education and Intercultural Competence
Spring 2011	Bell, Brian Y.	Action Sports Marketing: a Modern Approach to a Modern Industry	Entrepreneurial Film and Video
	,	Teaching and Assessing Immigrant Students and the Role of Teacher	
Spring 2011	Tabatabai, Asbah	Expectations	Sociocultural Education
		The Pediatric Oncologist-Patient Interaction: Promoting a	
Spring 2011	Daniel, Dana	Healthy Adjustment for Children with Cancer	Pediatric Health Psychology
		Determining the Challenges that Individuals Who Are Blind Experience	
Spring 2011	Packianathan, Jefreena	When Accessing Social Networking Websites	Human-Centered Computing
		An Investigation of the Status of Women and Education as Social	
Spring 2011	Gunter, Llsa	Determinants of Health	
Spring 2011	Schwartz, Joseph	Campus Sustainability: Something to Be Excited About	Social Sustainability
Spring 2011	Trapani, Nicholas B.	The Changing Face of International Organized Crime	Criminal Intelligence and National Security
Fall 2011		Individualized Privacy on the Internet	Critical Thinking with Perspectives in Law
Fall 2011	Ponter, Evan	Building a Better Concert Venue	Music Entrepreneurship
Fall 2011	Arias, Elizabeth	Child Neglect Training for Pediatricians in Baltimore-Area Hospitals	Pediatric Health Care
	,	Creating an Effective Musical Theater Curriculum for High School	
Fall 2011	Hrybyk, Rosalie	Students	Musical Theater Education
Spring 2012	Dewald, Yelena	Costa Rica's Debt for Nature Swaps Program	International and Global Studies
Spring 2012	Walker, Natassia	What It Takes: Success Versus Failure in the Restaurant Industry	Food Journalism and Entrepreneurship
Spring 2012	Jones, Jasmine	Visualizations for Self-Analysis of Performance for Older Adults	Human-Computer Interaction in an International Cultural Context
Spring 2012	Joseph, Achsah	What is Good Aid?	Genocide, Human Rights and International Diplomacy
		The Implications of Static and Dynamic Biopsychosocial Factors in	
Spring 2012	Mercer, Jennifer	Treatment of Female Juvenile Delinquents	Women and Criminal Law
		The Earthquake that Shook the World: Cultural Differences in Media	
Spring 2012	Becker, Alyson	Presentation of Japan's Tokoku Disater	Intercultural Communication and East Asian Studies
Spring 2012	McDaniels, Amie	An Environmental Curriculum in an Urban Setting	Urban Elementary Environmental Education
Spring 2012	Fowler, Amy	An Analysis of the Hukou System in China	Domestic Politics of Globalization in Contemporary China
Spring 2012	Destefano, Nicholas	A Biopsychosocial Perspective on Undergraduate Alcohol Use at UMBC	Biopsychosocial Health
Spring 2012	Epps, Ryan	After-School Education in Urban Community Centers	Community Arts Outreach
Spring 2012	Heasley, Kathleen	An Examination of the Hepatitis C Infection: From Virus to Disease	Biophysics
0 1 0010	<b>-</b>	Incorporating Health and Wellness into an Early Childhood Education	
Spring 2012	Tinnirella, Jaime	Environment	A Comprehensive Approach to Health, Wellness, and Early Education
Craving 0010	Drach Dahasaa	LLC Interacts Abread and Free Trade in the Middle Fast	Delitical and Casial Clabelization in the Middle Fast and North Africa
Spring 2012	Brach, Rebecca	U.S. Interests Abroad and Free Trade in the Middle East	Political and Social Globalization in the Middle East and North Africa
Spring 2010	Elathor (Clausor) Britter	What Moyoe Us to Action: Emotions in Social Cause Marketing	Information and Digital Modia Management
Spring 2012 Spring 2012	Platner (Glauser), Brittan Perdue, Courtney	What Moves Us to Action: Emotions in Social Cause Marketing Social Media and the Music Industry	Information and Digital Media Management Media Management and Music Performance
Spring 2012	Fincher, Erin	The Role of Style in Scientific Illustration	Visual Communications in Medicine
Spring 2012	Harris, Robin	The Lived Experience of Baltimore's Latino Immigrants	Community Development for Immigrant Populations
		The Lives Experience of Datamore a Latino minigranta	Community Development for miningrant r optiations

Spring 2012	Kahan, Samantha	Unity and Diversity in the Baltimore Jewish Community	Unity and Diversity in the American Jewish Community
		Redefining and Reconstructing Current Diabetes Management	
Fall 2012	Ndome, Rosine	Approaches for Low Literate Hispanic Patients	Health Literacy Promotion and Advocacy for an Immigrant Population
Fall 2012	Aslam, Amna	Reformed Juvenile Programs in Baltimore	Social and Cultural Aspects of Crime
Fall 2012	Welkner, Nicole	US-China Cyber-Security Issues	International Intelligence and Cyber Security: China
Fall 2012	McCarron, Jason	Do Ethics Matter in Leadership?	Studies in Ethical Leadership
Fall 2012	Pesci, Michael	Should Major League Baseball Expand the Current Instant Replay System?	Management and Communications in the Sports Industry
Fall 2012	Leclercq, Lauren	Expressive Inspiration: A Critical Look into How Poetry Affects Child Development	Creative Arts for Children
Fall 2012	Jacek, Danielle	The Struggles to Restoration: American Child Survivors of Sex Trafficking	Psychosocial Rehabilitation of Childhood Trauma
Fall 2012	Nicholson, Eric	Renewable Energy and the Residential Sector	Sustainable Practices in Management
Spring 2013	Kazi, Nicole	Accountability of NGOs in Haiti	Political and Cultural Aspects of International Development
Spring 2013	Frazer, Bernardine	Aging in State Prisons	Global and Sociocultural Issues in Health Care
Spring 2013	Majid, Asif	Othering at Play: The Magic of Empathy	Global Peace Building and Conflict Management
Spring 2013	Kim, Eunhyuk (Joseph)	What effects and impacts do various methods of social entrepreneurship have on reducing human trafficking in India?	Social Entrepreneurship
Epring 2012	Ness Aiver, Eliens	R2*-Relaxation Based Phenotypes for Assessment of Cerebral	Medical Imaging
Spring 2013	NessAiver, Eliana	Inflammation in Patients with Schizophrenia	Medical Imaging
Spring 2013	Allinder, Jason	Biopsychosocial Aspects of Ulnar Collateral Ligament Tears in Baseball Players	Biopsychosocial Aspects of Sports Injuries
Spring 2013	Currie, Sandra	Conventional Medicine vs. Complementary and Alternative Medicine for Type II Diabetes	Integrative Health
Spring 2013	Pitkanen, Nicole	Rehabilitation for a Total Knee Replacement	Approaches in Therapeutic Physical Functioning
Spring 2013	Gerber, Adam	The Integration of the Biological and Psychological Manifestations of Traumatic Brain Injury (TBI)	Neuropsychology
Spring 2013	Ko, Phillip	Analysis of the Occupy Movement	Social Change: Photography and Journalism
Spring 2013	Yoncha, Danielle	Taking an Interdisciplinary Approach to Environmental Science Education	Environmental Science Education
Spring 2013	Correa, Chris-Anne	Are higher levels of fitness (measured using VO2max) associated with better performance on tests of cognitive function in older adults?	Neuropsychology with Statistical Applications
		The connection between the Soviet Union's invasion of Afghanistan and	
Spring 2013	Fowler, Jamie	the 9/11 attacks: What did the U.S. miss along the way?	National Security Studies
Spring 2013	Lee, Miriam	How have stereotypes of the Muslim Diaspora evolved post 9/11?	Criminal Justice and Counter-Terrorism
Spring 2013	Meiser, Miriam Noelle	Framing the Brain: The Neuroscience of Spiritual Experience	Missionary Medicine and Perspectives on Healing
Spring 2013	Huynh, Donna	Communicating Autism Diagnosis to Families	Pediatric Health
Spring 2013	Cook, Dylan J.	Examining the Relationship between State-Based Health Insurance Exchanges and Health Care Non-Profits	Social Perspectives on Health Care
Spring 2013 Fall 2013	Marshall, Albert	Copyright Infringement in Relation to Digital Webcomics	Public Policy and Media Arts
Fall 2013	Louis, Matthania	Sustainable After-School Programs	After-School Education
Faii 2013	Louis, Matthania	Innovative Solutions to Address Hunger and Kodokushi (Lonely Death)	
Fall 2013	Tanaka, Yohka	in Japan	Social Entrepreneurship
Fall 2013	Schneider, Elizabeth	Demonstrating Science Writing through Two Articles on the Fukushima Daiichi Nuclear Incident	Science Writing

		Comparative Methods for Determining Ancestry of Unidentified Human	
Fall 2013	Epstein, Rachelle	Skeletal Remains	Bio-Cultural Hominid Anthropology
Fall 2013	Awosika, Ladi	Jazz in the Digital Age	Music Management and Performance
Fall 2013	Rosenbluth, Tali	The Music of Physical Therapy	Pediatric Physical Therapy
Fall 2013	Kadavil, Shana	Neonatal Pain	Neuroscience
Fall 2013	Brant, Lewis	Constructing a Webseries from the Ground Up	Digital Media: Art with Technology
Fall 2013	Queral, Luis	Designing with Stories	Story-centric Design for Web-Based Interactive Media
Fall 2013	Blank, Shayna	Aesthetic Autonomy in Feminist Creative Publication	Feminist Perspectives on the Literary Arts
		Understanding Fear: Social Anxieties in Japanese and American	
Fall 2013	Mauler, Steven	Horror Cinema	International Cinema
Spring 2014	Lynott, Elizabeth	Interdisciplinary Pediatric Pain Assessment	Pediatric Healthcare
Spring 2014	Zurkowski, Michael	Communication, Education & Engineering	Engineering Education
Spring 2014	Hester, Mary	Arts Advocacy: How to Inspire Policy Change by Communicating the Benefits of Arts Education	Arts Advocacy
Spring 2014	Ohiri, Joyce	Navigating Patient Decision-Making about Oncofertility through an Interdisciplinary Health Policy	Bioethics
Spring 2014	Hawkins, Samantha	The Image in Context: Constructing a Visual Research Methodology	Visual Research Methodology
Spring 2014	Patel, Shyam	Optimization of Pediatric Cancer Survivorship	Pediatric Healthcare
Spring 2014	Speaks, Lillian	The Resiliency Shield: Building Protective Options for Our Youth	Criminal Justice
Spring 2014	Vyas, Suraj	Water Resources Management & Policy: How to Counter the Impending Clean Water Crisis through Research, Innovation, and Global Cooperation	Water Resource Management and Policy
Spring 2014	Goles, Jillian G.	Seclusion and Restraint Policies and Practices in the Psychiatric Setting	
Spring 2014	Kennedy, Joseph	Psychosocial Criminology: An Integrated View at Recidivism	Criminal Justice
Spring 2014	Kelly, Rachel	The Mind as a Metronome: Music Therapy as a Treatment for Parkinson's Disease	Biopsychosocial Approaches to Health
Spring 2014	Kimery, Randy Jr.	Entrepreneurs and Integrative Medicine: Utilizing Innovative Solutions to Combat America's Obesity Epidemic	Integrative Health and Entrepreneurship
Spring 2014	Chioma, Vivian	The Integrative Treatment Approach of Methadone Maintenance Therapy and Contingency Management Against the Negative Effects of Opioid Addiction	Neuroscience
Fall 2014	Keys, Melanie	Composting at UMBC: A Social Marketing Study	Marketing
Fall 2014	Massey, Josh	Early Age Leadership Development	Leadership Development and Social Entrepreneurship
Fall 2014	Mulcahy, Shannon	Psychological Issues and Interventions of Sport Injuries in Endurance Athletes	Sports Psychology and Marketing
Spring 2015	Kelbaugh III, Michael K.	Understanding and Translating the Emotional Scars of Bullying	Afterschool Education through the Performing Arts
Spring 2015	Grant, Chad	JazzShoots.com: Integrated Marketing in the Era of Zeros and Ones	Integrated Marketing Communications
Spring 2015	Offenbacher, Kaili	A Biopsychosocial Approach to the Recovery of Traumatic Brain Injury in Adults	Neuropsychology
Spring 2015	Kang, Yoo-Jin	East-Asian-American Student Perspectives on Romantic Relationships and Violence	Psychosocial and Cultural Perspectives on Violence
Spring 2015	Naszkiewicz, Maciej	Entrepreneurs in Guatemala: A Practical Guide of Historical, Cultural, and Economic Perspectives	Intercultural Entrepreneurship
Spring 2015	Jain, Aastha	White Collar Crime and Mandatory Sentencing	Criminology and Criminal Justice
Spring 2015	Hoff, Sharde	Dissociative Disorders and its Prevalence in Trauma Victims	Neuropsychology
Spring 2015	Bennaman, Meagan M.	Capital Punishment in Maryland	Criminology

Spring 2015	Camacho, Andres	True Greens	Entrepreneurship and Digital Communication
Spring 2015	Donnellan, Kelsey	Vegetable and Fruit Consumption of Students at UMBC	Community Health and Nutrition
		Developmental Aging, Environmental Press, and Brain Development:	
Spring 2015	Karamsetty, Madhu	The Case of the Green House Model	Neuroscience and Developmental Aging
		Veteran Students' Success and Reintegration: Building a Better Campus	
Spring 2015	Rosenberry, Daryl	Community	Psycho-social Perspectives on Community Building
Fall 2015	Goodrich, Daniel	Arts Center Stage: Spotlighting America's Nonprofits	Arts Management
Fall 2015	Shinault, Oniesha	Rising Recidivism Rates in the African American Community	Criminal Justice
Fall 2015	Schmulowitz, John	Electronic Music Album Marketing	Music Entrepreneurship
		Examining the Association between Walking Exercises and Brain	
Spring 2016	Prasad, Priyanka	Structures in Older Adults	Neuroscience of Aging
Spring 2016	Ellerbrock, Adam	Synergistic Integration: Music and Visual Arts in Music Videos	Music and Art Production
Spring 2016	Scharfenberg, Eric	Facilitating Theatrical Design through Engineering	Entertainment Engineering
Spring 2016	Seu, Michelle	The Importance of Physical Beauty for the Modern American Woman	Human Aesthetics
		Changes in Somerset County Conventional Agriculture: The Multi	
Spring 2016	Brightman, Julianna	Generation Family Farmer at a Crossroads	Food System Studies
		On Games: Definition and Analysis from an Interdisciplinary	
Spring 2016	Freitag, Adam	Perspective	Ludology
		To MOOC or Not to MOOC: Massive Open Online Courses in High	
Spring 2016	Proctor, Markus	Schools	Technology Entrepreneurship and Organizational Management
		Dynamic Dentistry: An Interdisciplinary Solution to Differentiating Solo	
Spring 2016	Vanik, Paul	Practitioner Dental Businesses	Biomedical Science and Healthcare Systems
		Overweight among Salvadorian Children: An Exploratory Examination of	
Spring 2016	Venero, Sophia	Food Patterns and Cultural Influences	Community Health and Nutrition
Spring 2016	Stetyick, Alyson		Organizational Development
Spring 2016	Berger, Brendan	Creating Software to Improve Mathematics Education	Educational Software Development
Spring 2016	Starck, Andrew	Collaborative Engineering	Engineering Design and Management
		Investigating Developments, Perceptions, and Uses of Genetically	
Spring 2016	Opitz, Allison	Modified Crops in Maryland	Science Communication
Fall 2016	Zamzow, Bryan	Music Lessons for Well-being: Facilitating Flow	Music Education and Healing
		Measure Science with a Paint Brush: An Interdisciplinary Approach to	
Fall 2016	Wang, Hao	Scientific Illustration	Medical Illustration
Fall 2016	Paul, Neena	Promoting Critical Thinking in Elementary Education	Computational Education
Fall 2016	Schehr, Melanie	From Gleaned to Cuisine: Increasing Food and Nutrition Knowledge	Nutrition Education and Communication
Fall 2016	DiNardo, Stephen	Marketing a Sports Franchise in a Competitive Market	Brand Development
Fall 2016	Justus, Kevin	Do Fish have a Species Concept?	Animal Behavior
Fall 2016	Alban, Michelle	Teaching Diverse Learners in the Elementary School STEM Classroom	Environmental Science in an Elementary Classroom
		Humbaba & Homotherium: The Impacts of Macropredatory Cats on	
Spring 2017	McDougall, Jonathan	Human Culture and Evolution	Science Writing
0		Maternal Depression and Other Barriers to Early Head Start/ Head Start	
Spring 2017	Mizell, Marina	Enrollment in Baltimore, Maryland	Pediatric Psychological Neurological Development
	Detail I line and	Stress-Induced Analgesia: Exploring the Relationship Between Pain and	N
Spring 2017	Patel, Himadri	Stress The Impact Community Policing Has On Citizen Perception of Public	Neuroscience
Spring 0017	Griffith Wyott	Safety and Police Work	
Spring 2017	Griffith, Wyatt	Balely and Folice Work	Criminal Justice

On via a 0017	Dada Daaa	Information Flows and Food Assistance: Challenges to SNAP Program	East Outbury Deline
Spring 2017	Rada, Rosa	•	Food Systems Policy
		Latin American Immigrants' Health in the Baltimore Area: Provider	
		Perspectives of Alternative Remedy use during the Hospital to Home	
Spring 2017	Fernando, Nimasha	Transition of Care for Chronic Disease	Intercultural Health
Spring 2017	Jeyaraju, Maniraj	Using Games to Listen	Health Ethnography
Spring 2017	Schwarzenberg, Erik	Fare Finder: The Social Cooking App	Health and Wellness Entrepreneurship
		Finding the Target: Pre-service Teachers' Perspectives about Culturally	
Spring 2017	Simmons, Jazmin	Responsive Techniques	Culturally Responsive Techniques in Urban Math Education
Spring 2017	Alon, Guy	Stuxnet: A Control-Alt-Delete for the Physical World	Cyber Diplomacy
		"Making" a Difference: The Case Study of a Baltimore City, Youth-	
Spring 2017	Salib, Gabrielle	Oriented, Community Makerspace	Human-Centered Computing
Spring 2017	Lilly, Kayla	Best Practices in Event Management	Event Management
Spring 2017	Holte, Jessica	The Criminal Justice System and Child Pornography	Criminal Justice
Spring 2017	Funk, Karli	Understanding the Use of a Holistic Approach to Physical Therapy	Physiological Psychology
Spring 2017	Saloka, Elizabeth	Gendered Microaggressions in Computing Classrooms at UMBC	Gender Equality in Computing
		Sexual Health Interventions and Contraceptive Use on College	
Spring 2017	Smith, Kayla	Campuses	Public Health Advocacy
Spring 2017	Wertlieb, Brendan J	Music and the Socialpreneur	Music and Social Entrepreneurship
Fall 2017	Miller, Sarah	Dona de Casa: Women of Rio's Affordable Housing Movement	Global Perspectives in Documentary Photography
Fall 2017	Jung, Myungsun (Shelly)	Relationship between Bilingualism and Alzheimer's Disease	Patient-focused Neurology
Fall 2017	NessAvier, Tziona	Sonification of EEG and Associated Auditory Discrimination Task	Neurotech Engineering

# Table 14: Credits Required in UMBC Majors, 2017

Comparison of the sizes of majors at UMBC

Sources: UMBC Departmental Websites and INDS Data

Majors	Credits Required
Ancient Studies (B.A.)	30
Cultural Anthropology (B.A.)	31
Sociology (B.A.)	32
Africana Studies (B.A.)	36
Philosophy (B.A.)	36
Political Science (B.A.)	36
Global Studies (B.A.)	36
Gender and Women's Studies (B.A.)	36
· · ·	
Psychology (B.A.)	36
American Studies (B.A.)	36
Media and Communication Studies (B.A.)	37
English (B.A.)	39
History (B.A.)	39
Management of Aging Services (B.A.)	39
Modern Languages, Linguistics & Intercultural Communication (B.A.)	39-43
Economics (B.A)	40
Asian Studies (B.A.)	42
nterdisciplinary Studies (Minimum Required)	42
Biological Sciences (B.A)	45-46
Geography and Environmental Studies (B.A.)	48
Theatre (B.A.)	48-54
Health Administration and Policy (B.A.) Mathematics (B.A.)	<u>49</u> 50
Mainematics (B.A.) Music (B.A.)	56-86
Dance (B.A.)	58
Visual Arts (B.A.)	60
Financial Economics (B.S)	61
Mathematics (B.S)	61
Average Number of Credits in an INDS proposal	62
Chemistry (B.A)	62
Social Work (B.A.)	62
Environmental Science and Geography (B.S.)	63 64
Statistics (B.S.) Business Technology Administration (B.A)	66
Acting (B.F.A.)	69
Biological Sciences (B.S)	70
Psychology (B.S.)	71-72
Visual Arts (B.F.A.)	72
Chemistry (B.S)	72
Physics Education (B.A.)	73-74
Computer Science (B.S.)	77
Biochemistry and Molecular Biology (B.S.)	77-82
Information Systems (B.S)	78
Physics (B.S)	79

Bioinformatics and Computational Biology (B.S.)	92-96
Computer Engineering (B.S.)	97
Mechanical Engineering (B.S.)	102
Chemistry Education, Physical Chemistry Track (B.A.)	106
Biology Education (B.A.)	106
Chemistry Education, Biochem Track (B.A.)	107
Emergency Health Science, Management Track (B.S.)	120
Emergency Health Sciences, Paramedic Track (B.S.)	125-127
Chemical Engineering (B.S.)	129-133

# Table 15: Assessment of Physical Facilities and Support Facilities

An evaluation of the space in INDS

Facility	Very Adequate	Adequate	Inadequate	Very Inadequate
1. Office Space			•	
a. Staff Office Space				Х
b. Administrative Space				Х
c. Graduate Student Space - N/A				
2. Library				
a. Periodical Holdings		Х		
b. Book Holdings		Х		
c. Department-Based Holdings		X		
3. Computing Facilities				
a. Central Computer Server(s)				
1. Hardware		Х		
2. Software		X		
b. Department-Based				
1. Hardware				
2. Software				
4. Other Research Facilities				
a. Laboratories - N/A				
1. Space			Х	
2. Electric Power		Х		
3. Water and Sewer		X		
4. Lighting, Heat				Х
5. Ventilation			Х	
b. Equipment				
1. Faculty Research - N/A				
2. Teaching			Х	
3. Student Research				Х
5. Other				

Note: For each rating of Indequate or Very Inadequate, attach an explanation with an estimate of your needs. Use the Other category for special facilities such as machine shop, vivarium, studio, and so on.

#### Table 16: SCEQ Question #9 Summary

Q # 9. How would you grade the overall teaching effectiveness of this instructor?

		Instructor					ection	Q # 9. How would you grade the overall teaching effectiveness of this instructor?						
Semester	Course	Course Title Er	mplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Inst	ructor Mean Course Mean	n Dept Mean	UMBC Mean	Level Mean	Section Mean
Spring 2016	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	15	12	4.67	4.54 4	.71 4.:	L7 4.	23 4.67
Spring 2016	INDS 330 02	Ways Of Knowing	1000000542 Stephen	Freeland	LEC	С	inds 330 02/inds	11	9	4.2	4.54 4	.71 4.:	L7 4.	23 4.48
Spring 2016	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	15	3					
Spring 2016	INDS 330H 02	Ways of Knowing	1000000542 Stephen	Freeland	LEC	С	inds 330 02/inds	11	2					
Spring 2016	INDS 335 01	Degree Writing Se	1000002980 Eric	Brown	LEC			0	10	5	5 4	.71 4.:	L7 4.	23 5
Spring 2016	INDS 335 02	Degree Writing Se	1000002980 Eric	Brown	LEC			0	5					
Spring 2016	INDS 399 01	Guided Reading in	1000000542 Stephen	Freeland	LEC			0	11					
Spring 2016	INDS 430 02	Interdis Seminar	1000000542 Stephen	Freeland	LEC	С	inds 430 02/inds	18	14	4.67	4.83 4	.71 4.:	L7 4.	24 4.67
Spring 2016	INDS 430 04	Interdis Seminar	1000011145 Steven	McAlpine	LEC	С	inds 430 04/inds	. 2	1	5	4.83 4	.71 4.:	L7 4.	24 5
Spring 2016	INDS 430H 02	Interdis: Honors S	1000000542 Stephen	Freeland	LEC	С	inds 430 02/inds	18	3					
Spring 2016	INDS 430H 04	Interdis: Honors S	1000011145 Steven	McAlpine	LEC	С	inds 430 04/inds	. 2	1					
Spring 2016	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	2					
Spring 2016	INDS 480 02	Inds: Capstone Pr	1000000542 Stephen	Freeland	LEC			0	2					

		Instructor				Combined Section		Q # 9. How would you grade the overall teaching effectiveness of this instructor?						
Semester	Course	Course Title Er	nplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Inst	tructor Mean Course Mea	n Dept Mean	UMBC Mean	Level Mean	Section Mean
Fall 2015	INDS 232 01	Intro to Food Syst	3000397738 Jill	Wrigley	LEC			0	14	4.7	4.7	.54 4.	17 4.	L7 4.7
Fall 2015	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	16	13	4.55	4.68	.54 4.	17 4.	18 4.55
Fall 2015	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	16	11	4.82	4.68	.54 4.	17 4.	L8 4.82
Fall 2015	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	16	2					
Fall 2015	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	16	5					
Fall 2015	INDS 335 01	Degree Writing Se	1000002980 Eric	Brown	LEC			0	11					
Fall 2015	INDS 399 01	Guided Reading ii	1000000542 Stephen	Freeland	LEC			0	8					
Fall 2015	INDS 430 01	Interdis Seminar	1000000542 Stephen	Freeland	LEC	С	inds 430 01/inds	7	5					
Fall 2015	INDS 430 02	Interdis Seminar	3000709162 Fizza	Gulamali-Majid	LEC	С	inds 430 02/inds	10	7	4.2	4.1	.54 4.	17 4.	24 4.2
Fall 2015	INDS 430 03	Interdis Seminar	1000011145 Steven	McAlpine	LEC			0	4	4	4.1	.54 4.	17 4.	24 4
Fall 2015	INDS 430H 01	Interdis: Honors S	1000000542 Stephen	Freeland	LEC	С	inds 430 01/inds	7	2					
Fall 2015	INDS 430H 02	Interdis: Honors §	3000709162 Fizza	Gulamali-Majid	LEC	С	inds 430 02/inds	10	2					
Fall 2015	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	8					
Fall 2015	INDS 480 02	Inds: Capstone Pr	2000120766 Asif	Majid	LEC			0	7	5	5	.54 4.	17 4.	24 5

		Instructor					ction	Q # 9. How would you grade the overall teaching effectiveness of this instructor?						
Semester	Course	Course Title En	nplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instru	uctor Mean Course Mea	n Dept Mean	UMBC Mean	Level Mean	Section Mean
Spring 2015	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	26	20	4.57	4.71 4	1.64 4.	17 4.2	4.57
Spring 2015	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	19	15	4.85	4.71 4	4.64 4.	17 4.2	4.85
Spring 2015	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	26	6					
Spring 2015	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	19	3					
Spring 2015	INDS 335 01	Degree Writing Se	1000002980 Eric	Brown	LEC			0	14	5	4	4.64 4.	17 4.2	1
Spring 2015	INDS 335 02	Degree Writing Se	1000002980 Eric	Brown	LEC			0	1					
Spring 2015	INDS 399 01	Guided Reading in	1000000542 Stephen	Freeland	LEC			0	5					
Spring 2015	INDS 430 01	Interdis Seminar	3000397738 Jill	Wrigley	LEC	С	inds 430 01/inds	17	15	4.36	4.59 4	4.64 4.	17 4.2	4.36
Spring 2015	INDS 430 02	Interdis Seminar	1000000542 Stephen	Freeland	LEC	С	inds 430 02/inds	11	10	4.57	4.59 4	1.64 4.	17 4.2	4.57
Spring 2015	INDS 430 03	Interdis Seminar	1000002980 Eric	Brown	LEC	С	inds 430 03/inds	7	6					
Spring 2015	INDS 430 04	Interdis Seminar	1000011145 Steven	McAlpine	LEC			0	12	4.83	4.59 4	1.64 4.	17 4.2	4.83
Spring 2015	INDS 430H 01	Interdis: Honors S	3000397738 Jill	Wrigley	LEC	С	inds 430 01/inds	17	2					
Spring 2015	INDS 430H 02	Interdis: Honors S	1000000542 Stephen	Freeland	LEC	С	inds 430 02/inds	11	1					
Spring 2015	INDS 430H 03	Interdis: Honors S	1000002980 Eric	Brown	LEC	С	inds 430 03/inds	7	1					
Spring 2015	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	3	4.67	4.67	4.64 4.	17 4.2	4.67

	Instructor				Combined Section		Q # 9. How would you grade the overall teaching effectiveness of this instructor?							
Semester	Course	Course Title	Emplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instructor Mea	Course Mean	Dept Mean	UMBC Mean	Level Mean	Section Mean
Fall 2014	INDS 232 01	Intro to Food Syst	3000397738 Jill	Wrigley	LEC			0	17 4.5	6 4.5	5 4.46	4.14	4.1	4.56
Fall 2014	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	20	15 4.9	2 4.8	5 4.46	4.14	4.1	4.92
Fall 2014	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	20	17 4.7	8 4.8	4.46	4.14	4.1	4.78
Fall 2014	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330 01/inds	20	4					
Fall 2014	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	inds 330 02/inds	20	3					
Fall 2014	INDS 335 01	Degree Writing Se	1000002980 Eric	Brown	LEC			0	13	4 4	4.46	4.14	4.1	3 4
Fall 2014	INDS 399 01	Guided Reading ir	1000000542 Stephen	Freeland	LEC			0	3					
Fall 2014	INDS 430 01	Interdis Seminar	1000000542 Stephen	Freeland	LEC	С	inds 430 01/inds	. 14	11 4	3 4.4	4.46	4.14	4.2	L 4.3
Fall 2014	INDS 430 02	Interdis Seminar	3000709162 Fizza	Gulamali-Majid	LEC	С	inds 430 02/inds	. 18	13 4.6	4 4.4	4.46	4.14	4.2	4.64
Fall 2014	INDS 430H 01	Interdis: Honors S	1000000542 Stephen	Freeland	LEC	С	inds 430 01/inds	. 14	3					

Fall 2014	INDS 430H 02	Interdis: Honors S	3000709162 Fizza	Gulamali-Majid	LEC	С	inds 430 02/inds	18	3						
Fall 2014	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	12	4	4	4.46	4.14	4.21	4
			Instructor			Combined Se	ction	Q # 9. How would you grade	e the ov	erall teaching effectiveness of t	his instructor?				
Semester	Course	Course Title	Emplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Tota	al	Instructor Mean Course Mean	Dept Mear	n UMBC Mei	n Level Mear	Section Me	an
Spring 2014	INDS 330 01	Ways Of Knowing	1000004395 James	Thomas	LEC	С	INDS 330-01/IND	16	13	5	5	4.65	4.14	4.18	5
Spring 2014	INDS 330 02	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330-02/IND	16	13						
Spring 2014	INDS 330H 01	Ways of Knowing	1000004395 James	Thomas	LEC	С	INDS 330-01/IND	16	3						
Spring 2014	INDS 330H 02	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330-02/IND	16	1						
Spring 2014	INDS 430 01	Interdis Seminar	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/I	20	14	4.6	4.55	4.65	4.14	4.24	4.6
Spring 2014	INDS 430 02	Interdis Seminar	1000000542 Stephen	Freeland	LEC	С	inds 430-02/inds	14	9	4.5	4.55	4.65	4.14	4.24	4.5
Spring 2014	INDS 430H 01	Interdis: Honors S	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/I	20	6						
Spring 2014	INDS 430H 02	Interdis: Honors S	1000000542 Stephen	Freeland	LEC	С	inds 430-02/inds	14	5						
Spring 2014	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	6	4.5	4.5	4.65	4.14	4.24	4.5

			Instructor			Combined Sec	ction (	Q # 9. How would you grade the	e overall teaching	effectiveness of th	is instructor?			
Semester	Course	Course Title E	mplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instructor Me	an Course Mean	Dept Mean	UMBC Mean	Level Mean	Section Mean
Fall 2013	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330-01 / ind:	16	10	4.4 4	59 3.8	82 4.1	2 4.09	4.4
Fall 2013	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	inds 330-02 / ind:	17	12 4	.79 4	59 3.	82 4.1	2 4.09	4.79
Fall 2013	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds 330-01 / ind:	16	4					
Fall 2013	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	inds 330-02 / ind:	17	5					
Fall 2013	INDS 430 01	Interdis Seminar	3000498685 Natasha	Ryan	LEC	с	inds 430-01 / ind:	11	8	2.5	2.5 3.4	82 4.1	2 4.2	2.5
Fall 2013	INDS 430H 01	Interdis: Honors S	3000498685 Natasha	Ryan	LEC	С	inds 430-01 / ind:	11	3					
Fall 2013	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	7	3.6	3.6 3.8	82 4.1	2 4.2	3.6
Fall 2013	INDS 480 02	Inds: Capstone Pr	1000000542 Stephen	Freeland	LEC			0	4					

			Instructor			Combined Se	ction	Q # 9. How would you grade th	e overall te	aching effectiveness of	his instructor?			
Semester	Course	Course Title E	mplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instruc	tor Mean Course Mean	Dept Mean	UMBC Mean	Level Mean	Section Mean
Spring 2013	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330-01/IND	16	11	4.67	4.72 4	.73 4.	14 4.:	19 4.67
Spring 2013	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	INDS 330-02/IND	17	13	4.77	1.72 4	.73 4.	14 4.	19 4.77
Spring 2013	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330-01/IND	16	5					
Spring 2013	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	INDS 330-02/IND	17	4					
Spring 2013	INDS 430 01	Interdis Seminar	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/II	13	8	4.67	1.67 4	.73 4.	14 4.3	4.67
Spring 2013	INDS 430H 01	Interdis: Honors S	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/II	13	5					
Spring 2013	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	9	4.8	4.8 4	.73 4.	14 4.:	21 4.8

			Instructor			Combined Sec	tion	Q # 9. How would you grade th	e overall teaching e	ffectiveness of this	instructor?			
Semester	Course	Course Title Er	mplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instructor Mea	n Course Mean	Dept Mean	UMBC Mean	Level Mean	Section Mean
Fall 2012	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330 8998/II	16	10 4.	82 4.9	1 4.62	2 4.13		4.1 4.82
Fall 2012	INDS 330 02	Ways Of Knowing	1000004395 James	Thomas	LEC	С	INDS330 10804/I	16	13	5 4.9	1 4.62	2 4.13		4.1 5
Fall 2012	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330 8998/II	16	5					
Fall 2012	INDS 330H 02	Ways of Knowing	1000004395 James	Thomas	LEC	С	INDS330 10804/I	16	3					
Fall 2012	INDS 430 01	Interdis Seminar	3000498685 Natasha	Ryan	LEC	С	INDS 430 8937/II	15	11 4.	08 4.0	8 4.62	4.13	4	22 4.08
Fall 2012	INDS 430H 01	Interdis: Honors S	3000498685 Natasha	Ryan	LEC	С	INDS 430 8937/II	15	4					
Fall 2012	INDS 480 01	Inds: Capstone Pr	1000003267 Eric	Montgomery	LEC			0	10 4.	33 4.6	1 4.62	4.13	4	22 4.33
Fall 2012	INDS 480 02	Inds: Capstone Pr	1000004081 Patricia	Lanoue	LEC			0	11 4.	89 4.6	1 4.62	4.13	4	22 4.89

			Instructor			Combined Se	ction	Q # 9. How would you grade th	he overa	Il teaching effectiveness of t	nis instructor?			
Semester	Course	Course Title En	nplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Ins	tructor Mean Course Mear	Dept Mean	UMBC Mean	Level Mean	Section Mean
Spring 2012	INDS 330 01	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330 3260/II	14	10	4.4	.39	4.1 4	11 4	.13 4.4
Spring 2012	INDS 330 02	Ways Of Knowing	1000007055 James	Scott	LEC	С	INDS 330 3261/II	16	13	4.38	.39	4.1 4	11 4	.13 4.38
Spring 2012	INDS 330H 01	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	INDS 330 3260/II	14	4					
Spring 2012	INDS 330H 02	Ways of Knowing	1000007055 James	Scott	LEC	С	INDS 330 3261/II	16	3					
Spring 2012	INDS 430 01	Interdis Seminar	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/II	17	14	4.1	4.1	4.1 4	11 4	.18 4.1
Spring 2012	INDS 430H 01	Interdis: Honors §	3000397738 Jill	Wrigley	LEC	С	INDS 430 3267/II	17	3					
Spring 2012	INDS 480 01	Inds: Capstone Pr	1000004081 Patricia	Lanoue	LEC			0	12	3.5	3.5	4.1 4	11 4	.18 3.5

			Instructor			Combined Se	ection	Q # 9. How would you grade th	e overall teachir	ng effectiveness of	his instructor?			
Semester	Course	Course Title E	mplid FirstName	LastName	Course Type	Indicator	Section(s)	Combined Enroll Enroll Total	Instructor N	Mean Course Mea	Dept Mean	UMBC Mean	Level Mean	Section Mean
Fall 2011	INDS 330 1	Ways Of Knowing	1000011145 Steven	McAlpine	LEC	С	inds330 8998/ind	16	11	4.86	4.54 4	.55 4.3	.1 4.0	4.86
Fall 2011	INDS 330 2	Ways Of Knowing	1000007055 James	Scott	LEC	С	INDS330 10804/II	16	12	4.22	4.54 4	.55 4.3	.1 4.0	4.22
Fall 2011	INDS 330H 1	Ways of Knowing	1000011145 Steven	McAlpine	LEC	С	inds330 8998/ind	16	4					
Fall 2011	INDS 330H 2	Ways of Knowing	1000007055 James	Scott	LEC	С	INDS330 10804/II	16	1					
Fall 2011	INDS 430 1	Interdis Seminar	3000176636 David	Tarantino	LEC	С	inds430 8937/ind	16	14	4.4	4.4 4	.55 4.3	.1 4.2	1 4.4
Fall 2011	INDS 430H 1	Interdis: Honors 5	3000176636 David	Tarantino	LEC	С	inds430 8937/ind	16	2					
Fall 2011	INDS 480 1	Inds: Capstone Pr	1000004081 Patricia	Lanoue	LEC			0	9	4.86	4.63 4	.55 4.3	.1 4.2	4.86
Fall 2011	INDS 480 2	Inds: Capstone Pr	1000004081 Patricia	Lanoue	LEC			0	6	4.4	4.63 4	.55 4.3	.1 4.2	1 4.4

					Assessment at a second Direct of the				
					Appropriateness & Desirability				
		Name		Placement	of Placement				
Level	Program Name	(last, first)	Year Granted	(Title & Address)	Very Poor Excellent				
					1	2	3	4	5
MA					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
						2	3	4	5
					1	2	3	4	5
PhD					1	2	3	4	5
LID					1	2	3	4	5
					1			•	
					1	2	3	4	5
					1	2 2	3 3	4	5 5
					1	2	3	4	5
					1	2	3	4	5 5 5 5 5 5 5
					1	2	3	4	5
					1	2	3	4	5
					1	2 2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5
					1	2	3	4	5 5
					1	2	3	4	5
					1	2 2	3	4	5 5
					1	2	3	4	5

## Table 17: Placement of Graduates (Graduate School)

Please rate appropriateness and desirability in relation to the goals and objectives of your program.

#### Table 18: Results from Surveys of Recent Graduates (One-Year Follow-Up)

Source: Questionnaire for Recent UMBC Graduates - Survey of Bachelor's Degree Recipients One Year Later.
Prepared by: UMBC Office of Institutional Research, 09/2017.

Class of	2004	2007	2010	2013	2016
	# %	# %	# %	# %	# %
# Respondents	10	7	6	5	2
Enrolled in Graduate School:					
YES	5	3	2	3	0
NO	5	4	4	2	1
Employment Status:					
Full-Time	5	7	3	1	1
Part-Time	2		1	1	0
Unemployed, seeking employment	0		2	1	0
Unemployed, but not seeking	3			2	0
# Full-time Employed Respondents	5	7	3	1	1
Occupation of FT Employed Respondents:					
Armed Forces					
Manager/ Exec/ Proprietor					
Administrative Assistant					
Sales Agent/ Representative			1		
Accountant/ Fin Analyst/ Banker/					
Broker/ Claims Adjuster					
Buyer/ Purchasing Agent Comp Programmer/ Analyst					
Teacher		3	1	1	
Educ Administrator/ Counselor/ Librarian					
Engineer/ Architect					
Engineering or Science Tech Health Professional	2	1			
Health Technician	-				
Legal Paraprof/ Law Enforce Officer					
Personnel/ Labor Rel Specialist					
Recreation Worker Scientist/ Statistician/ Sci Researcher					
or Analyst		1			
Social Worker					
Writer/ Journalist/ Public Info					
Artist/ Entertainer/ Photographer/ Athlete Other Professional	2	2			1
Secretary/ Clerical	1	L	1		'
Skilled Craftsworker					
Service Worker/ Sales Clerk/ Laborer					
Unskilled Worker/ Machine Oper/ Driver					
Major in Same Field if Had It to Do Over:					
YES	6	4	4	NA	1
NOT SURE	2	0	2	NA	0

NO	2	3		NA		0	
							-

\* Surveys are of fiscal year graduates, i.e., Class of 2004 includes August 2003, December 2003 and May 2004 graduates.

#### Table 19: Majors & Degrees Projections

	Current Review Year	r	Year 1 After Review		Year 2 After Review		Year 3 After Review	
	# students enrolled	# degrees granted						
Master								
Ph.D.								

#### Table 20: Student Achievements 2011-2017

Highlights of INDS Student Achievements Source: INDS Departmental Data

#### Phi Beta Kappa: INDS majors inducted into UMBC Eta Chapter, 2011-2017

2011	Christina Briscoe
2012	NIcholas DeStefano
	Yelena Dewald
	Evan Ponter
2015	Himadri Patel
	Priyanka Prasad
2017	Maniraj Jeyaraju
	Myungsun Jung
	Simon Maxwell

#### UMBC Alumni Awards to INDS Students

Career Achievement 1992	Stephen J. Vicchio
Career Achievement 1997	Richard W. Moreland
Career Achievement 2001	Richard T. Chisolm
Career Achievement 2001	William A. Whiteford
Distinguished Service 2007	Eli Eisenberg
Outstanding Alumni of the Year 2011	Jeffrey Wilkinson

#### Scholarships and Awards

UMBC Finalist Rhodes Scholarship, 2011	Christina Briscoe
UMBC Nominee Marshall Scholarship,	
2011	Alison Isberg
UMBC Finalist Research Scholarship,	
Brazil, 2011	Christina Briscoe
UMBC Finalist Boren Scholarship,	
Morocco, 2011	Asif Majid
Fulbright Student Grant Recipient, English	
Teaching Assistantship, Malaysia, 2012	Achsah Joseph
Shriver Center's Samuel I. Rosenberg	
Citizenship Award, 2012	Yelena Dewald
Boren Award, Morocco, 2013	Valerie Quackenbush

UMBC Nominee Marshall Scholarship,	
2013	Asif Majid
UMBC Nominee Truman Scholarship, 2013	Samantha Hawkins

#### Undergraduate Research Awards (URA)

Year		Name		
	2011	Emily Kimak		
	2011	Theresa Columbus		
		Christine Osazuwa		
		Achsah Joseph		
	2011	Eliana NessAiver		
		Amy Fowler		
		Asif Majid		
		Asif Majid		
	2014	Valerie Quackenbush		
		Samantha Hawkins		
		Shayna Blank		
		Kelsey Donnellan		
		Adam Frietag		
		Nimasha Fernando		
		Maniraj Jeyaraju		
		Sarah Miller		
	2017	Himadri Patel		

Publication in Bartleby				
2012 Yoo-Jin Kang	Visual Art			
2013 Shayna Blank	Poetry			
2015 Allison Opitz	Creative Nonfiction			

## Undergraduate Research and Creative Achievement Day (URCAD)

Year		Name	Title	Presentation
	2011 Emily Kimak "Moving to Wat		"Moving to Water"	Dance and Oral
	2011	Theresa Columbus	"Nostalgia for Everything"	Video
			"Always Wanting More: Access, Entitlement and	
			Expectations of Popular Music Bands in the Age of Social	
	2011	Christine Osazuwa	Media"	Video
			"Adolescent Mothers in a Quilombo Community: Praia	
	2011	Christina Briscoe	Grande, Brazil"	Oral
			"An Analysis of the Peace-building Strategies in Ker Kwaro	
	2011	Achsah Joseph	Acholi's Strategic Plan 2009-2014"	Poster
			"Parameterization of Ligands Associated with the RNA	
	2011	Kathleen Heasley	Dependent RNA Polymerase Found in Hepatitis C Virus"	Poster

		"Smoking and Perceived Health Status among Adults with	
2011	Donna Huynh	Sickle Cell Disease"	Poster
		"Evaluating the Mid-Atlantic Wind Energy Resource: A Multi-	
2011	Eliana NessAiver	Platform Data Analysis Study"	Poster
		"Life on 'Mars': Diversity of Endolithic Microorganisms in a	
2011	Donna Viola	Terrestrial Martian Analog"	Poster
		"Historic Preservation: Developing Sense of Place on the	
2011	Joseph Wesolowski	University of Maryland, Baltimore County Campus"	Poster
		"The Earthquake that Shook the World: Cultural Differences	Presentation
		in Media Presentation of of Japan's Tohoku Disaster"	
2012	Alyson Becker		
	Amy Fowler	"An Analysis of the Hukou System in China"	Presentation
2012	Asif Majid		
		"The Implications of Static and Dynamic Biopsychosocial	Presentation
2012	Jennifer Mercer	Factors in Treatment of Female Juvenile Delinquents"	
	Asif Majid	"This Moroccan Life"	Presentation
	· · · · ·	"Fear Be Gone: Endocannabinoids Modulate Subsecond	Poster
		Dopamine Release During the Extinction of Fear Memories"	
2013	Vivian Chioma		
		"The Integration of the Biological and Psychological	Presentation
2013	Adam Gerber	Manifestations of Traumatic Brain Injury"	
	Shana Kadavil	"Assessing the Affective Component of Pain"	Poster
20.0		"SHOWHAUS: An Open-Source Directory for Underground,	Presentation
2013	Luis Queral	Fringe Music and Art Communities"	
20.0			Poster
2013	Yohka Tanaka	Change on UMBC Campus"	
20.0		"Characterizing the AC1-Exemestane Resistant Cell Line in	Poster
2013	Joyce Ohiri	Estrogen-Dependent Breast Cancer"	
		"Investigation of Dimerization Mechanisms in the Simian	Poster
2014	Michelle Seu	Immunodeficiency Virus 5'-Untranslated Region"	
		"Baltimore Voices: Creating a Comprehensive Sense of	Presentation
2014	Samantha Hawkins	Place and Identity"	
_0		"Student Learning Outcome: Communication Engineering	Poster
2014	Michael Zurkowski	Design"	
2011		"True Greens: Creating a Community-Based Food System"	Poster
2015	Andres Camacho		
	Kelsey Donnellan	"Eating Habits of College Students at UMBC"	Poster
20.0		"Art Installations as a Means of Increasing Scientific	Poster
2015	Chana Honick	Awareness: The Haber Process"	
2010			Poster
2015	Maniraj Jeyaraju	Perspectives"	
2013	mannaj obyanaja	"East-Asian-American Student Perspectives on Romantic	Presentation
2015	Yoo-Jin Kang	Relationships and Violence"	
	Variety of Students	"Kinetic Sculpture Race"	Artistic
2013		"Gender Differences in the Relationship Between Anxiety	Poster
		and the Function of the Endogenous Pain Inhibitory	
2015	Himadri Patel	Systems"	
2015		Oyolollo	

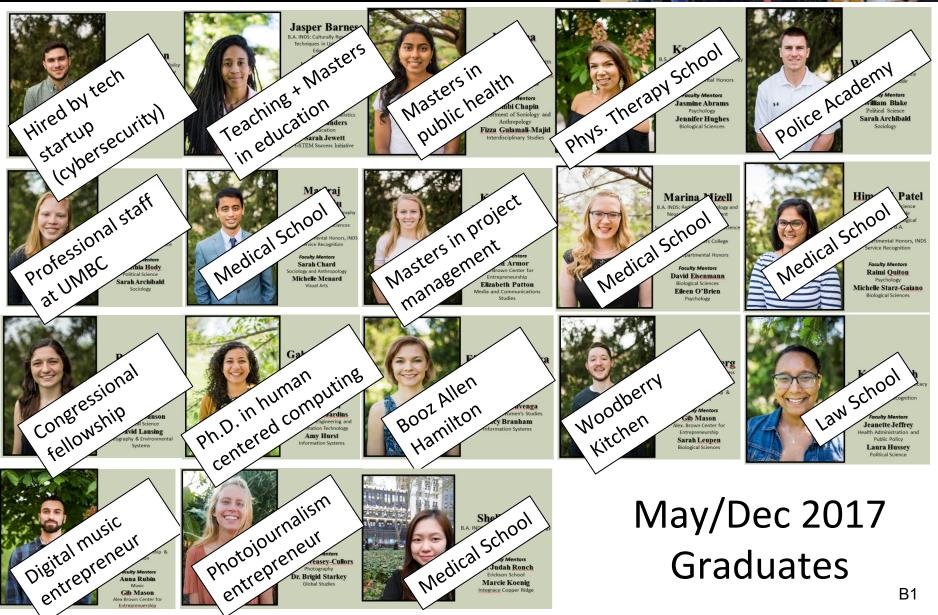
		"Evaluating Educational Games for Validity and Student-	Presentation
2016	Adam Freitag	Player Engagement"	
		"Exploring Potential Benefits of Three-Dimensional Printing	Poster
2016	Gabrielle Salib	Technology in Elementary School Settings"	
		"The Importance of Physical Beauty to the Modern American	Presentation
2016	Michelle Seu	Woman"	
		"Overweight among Salvadorian Children: An Exploratory	Presentation
2016	Sophia Venero	Examination of Food Patterns and Cultural Influences"	
2016	Hao Wang	"Seeing Science"	Presentation
			Presentation
		"Latin American Immigrants' Health in the Baltimore Area: A	
2017	Nimasha Fernando	Qualitative Study of the Hospital to Home Transition in Care"	
		"Ethnographic Study of Cardiovascular Attitudes among	Presentation
2017	Maniraj Jeyaraju	Adolescents in India"	
		"Aftermath: Daily Life and Community Organization Along the	Presentation
2017	Sarah Miller	Rio Doce"	
		"The Effect of Maternal Depressive Symptoms on Child Early	Presentation
2017	Marina Mizell	Head Start and Head Start Enrollment"	
2017	Himadri Patel	"Brain Mechanisms of Stress-Induced Analgesia"	Presentation
		"Information Flows and Food Assistance: Challenges to	
2017	Rosa Rada	SNAP Program Provision in Baltimore City"	Presentation

Year Name Title					
2012	Christina Briscoe	"Young Mothers in a Quilombo Praia Grande, Brazil"			
	"East Asian UMBC Students' Perspectives on Intimate				
2016 Yoo-Jin Kang Relationships and Violence"					

		Tabl	e 21: INDS 335 D	egree Writing Ser	ninar		
	An analys	sis of enrollment in	INDS 335, retent	ion in INDS, and g	raduation from the	program	
		Γ	Source: INDS D	epartmental Data	1	1	
	Enrolled	Completed	Submitted Degree Plan	Degree Plan Submission Rate (of those who complete the course)	Graduated	Graduation Rate (of those who complete the course)	
Fall 2013	8	7	6	85.71%	6	85.71%	
Spring 2014	5	4	4	100.00%	4	100.00%	
Fall 2014	16	10	7	70.00%	5	50.00%	
Spring 2015	15	15	7	46.67%	6	40.00%	
Fall 2015	11	11	9	81.82%	4		pending completion of program which would raise this figure to 73%
Spring 2016	15	14	11	78.57%	2		6/9 are pending completion of program
Fall 2016	9	8	5	62.50%			4/5 are pending completion of program
Spring 2017	10	8	5	62.50%			5/5 are pending completion of the program

	Table 22: INDS 399 Guided Reading in INDS								
	An analysis of enrollment in INDS 399, retention in INDS, and graduation from the program								
		Source	: INDS Departmen	tal Data	r				
	Enrolled	passing grade	Completion Rate	Graduated	(of those who				
Fall 2014	3	3	100.00%	3	100.00%				
Spring 2015	5	4	80.00%	3	75.00%				
Fall 2015	8	7	87.50%	7	100.00%				
Spring 2016	11	10	90.91%	10	100.00%				
Fall 2016	4	4	100.00%	4	100.00%				
Summer 2017 2 100.00%									
Summer 2017	progress towa								

INDS EST. 1868 INTERDISCIPLINARY STUDIES



# Meeting Minutes April 12, 2015 in Fine Arts 413

# In Attendance: Dr. Carol McCann, Dr. Stephen Freeland, Samirah Hassan, Rachel Carter

Dr. McCann opened the meeting by explaining that its purpose was to inform Dr. Freeland about the concerns she has been hearing from faculty members in the College of Arts and Humanities and Social Sciences (CAHSS). She offered that INDS may have concerns too (such as not being able to find full-time faculty to serve as degree mentors), and that these two sets of concerns might be related. Dr. McCann listed these concerns as follows:

## Coursework

INDS students sometimes count on courses that departments have stopped offering.

- INDS Students sometimes omit pre-requisites needed for upper level courses they include within their degree plans.

- INDS students' degrees sometimes come close to duplicating pre-existing degrees that omit some upper level courses.

## **Faculty Mentors**

- Faculty contribution of effort towards the INDS degree is not well captured, and this can diminish motivation to particpate.

- Instructional faculty perceive that INDS students are sometimes taking most of their coursework (credits) in one program but that program (department) that does not then receive appropriate recognition for this because the student does not complete a major, minor or certificate in the program.

- Faculty mentors are concerned that students of INDS sometimes lack sufficient contact with (faculty) experts in their chosen field of academic specialization – for example, in shaping their degree proposals

# **Representation at Degree Approval Process**

- Dr. McCann advanced the opinion that there is not enough representation of faculty from CAHSS in the process of degree proposal approval, reporting that the web presence for INDS lists one lecturer, one assistant professor, and one affiliated professor as CAHSS members of the ISC.

- Dr. McCann offered the opinion that CAHSS should have broader representation on the ISC as this college has "approved academic curricula in Interdisciplinary fields"

- Dr. Freeland suggested that other colleges focus more on number of students taking their classes rather than numbers of declared majors and minors. Dr. McCann. Dr. McCann mentioned that the two colleges other than CAHSS each offer only 4 majors as compared to

CAHSS which offers 35 (the number 39 was mentioned at another instance). Dr. Freeland mentioned that the two other colleges also have small majors (such as Biochem, Bioinformatics, etc) and are struggling with similar issues to those faced by some units within CAHSS. Dr. Freeland suggested and encouraged more collaboration between colleges to tackle these issues.

#### Other

- Dr. McCann reported that INDS is sometimes seen as a "sink" for students by some faculty within CAHSS (i.e. once a student has declared INDS, they can be unwilling to leave upon the advice of faculty and advisors in other academic units.)

- Dr. McCann suggested that Dr. Freeland write up a report to share with the Task Force addressing these concerns.

- Dr. McCann is seeking to meet with Dr. Ken Baron to talk about advising. Specifically, she would like to approach him about the perception that when students come in and talk about interest in two or more disciplines, they are automatically referred to INDS.

- Dr. McCann asked whether the INDS program does a good enough job of passing students to other academic programs to which they would be better suited?

- Dr. McCann suggested searching for examples of "individualized majors" at other institutions that serve as a conduit to traditional, degree granting units. The institutions of NC State University and Duke University were mentioned. Dr. McCann indicated she would forward the appropriate links to Dr. Freeland.

- Dr. Freeland mentioned the AIS and IMP conferences and suggested how Dr. McCann might enjoy attending those. Dr. Freeland also mentioned that UMBC is hosting the AIS conference in October 2017 and asked Dr. McCann to present in one of the sessions about her work to organize and improve interdisciplinarity on a campus-wide footing.

# **INDS Honors Curriculum**

Last amended Dec 20th 2016

INDS majors are not required to be members of UMBC's Honors College in order to graduate with honors from UMBC. Specifically, students may apply to graduate with *Honors in Interdisciplinary Studies* ('Program Honors') by the satisfactory completion of the following requirements over and above <u>the usual requirements for a Bachelor's Degree in Interdisciplinary Studies</u>:

- 1. A written intention to graduate with INDS program honors is required as part of the degree plan proposal.
- 2. A cumulative GPA of 3.5 or better in all coursework that forms part of the student's unique INDS degree
- 2. A grade of B or better in all INDS coursework
- 3. Completion of the "Honors Curriculum" of INDS330H<sup>1</sup>, INDS430H and INDS490H.
  - In order enroll in INDS430H, prior to the course add/drop date of the semester in question, a student must reach an agreement with the professor delivering their section about an appropriate plan for work that exceeds the regular section of the class including a commitment to availability for this work. This agreement should be acknowledged in writing by the professor in question e.g. an email stating the terms of the agreement. Students enrolled within INDS430H cannot achieve a final grade higher than "C" for merely excelling in the content of the regular course.
  - students must apply to enroll in INDS490H *prior to completion of* INDS480. This declaration should include a written justification of what will make their execution of INDS490 worthy of honors. Detailed guidelines are <u>here</u>:

<sup>&</sup>lt;sup>1</sup> Alternatives to 330H may be accepted by special arrangement with the director - these include retrospective enrollment into the H section of INDS330 from students who have taken 'regular' INDS330.

# ACADEMIC PROGRAM PROPOSED NAME CHANGE FROM INTERDISCIPLINARY STUDIES TO INDIVIDUALIZED STUDY

We propose that the *Interdisciplinary Studies* degree program at UMBC be renamed to become the *Individualized Study* degree program. The rationale for this change is to establish a name for the program that most accurately reflects the academic opportunity offered to students. Clarifying the program's focus of offering students the opportunity to develop an individualized course of study with guidance from faculty advisors, the proposed new name will facilitate student success. In particular, it will enable academic advisors to refer students whose intellectual interests are a good match for the opportunities offered by the program.

The proposed change requires no curricular changes or additional resources and makes no change in the program's target audience and market.

#### **Background**

In 1969, UMBC created the degree-granting program *Option II* as an alternative to the traditional thirteen majors offered at that time (known collectively as *Option I*) in order to "*Afford highly motivated and intellectually mature students the opportunity to construct their own academic programs*"[1] In 1979, *Option II* was renamed *Interdisciplinary Studies* to embrace an emerging body of national scholarship about integrating knowledge from different disciplines into coherent degrees (e.g. see [2]).

Between 1969 and 2017, the number and scope of undergraduate degree programs (majors) offered by UMBC increased from thirteen to sixty-six. This growth includes the creation of many explicitly interdisciplinary degree programs (Ancient Studies, Media and Communication Studies, Environmental Science *etc.*)

#### <u>Rationale</u>

Individualized degree programs are a specific sub-type of interdisciplinary degree program. All individualized degree programs involve interdisciplinarity because they encourage students, with faculty support, to combine coursework drawn from different disciplines into a coherent whole. However, not all interdisciplinary programs involve individualized study, because many focus their students on a singular combination of disciplines or topic (e.g. Biochemistry, Asian Studies or Engineering Management).

As a result of growth in the number of interdisciplinary majors offered by UMBC, it is no longer helpful for a single academic program at UMBC to retain the name "*Interdisciplinary Studies*." A recent (2015) report commissioned by UMBC's Provost to describe interdisciplinary activities at UMBC concludes its introduction thus:

"[the true] wealth and diversity of interdisciplinary activities is not visible in the UMBC narrative. Instead, in many instances the word interdisciplinary is understood only to refer to the Interdisciplinary Studies Program, the individualized undergraduate major option." (p. 4). The report goes on to recommend that "A part of this goal [to improve interdisciplinary advising] will be to help advisors more effectively route students to the appropriate departments when they have interdisciplinary or multiple interests. At the moment, advisors, and thus incoming students, are only introduced to the Interdisciplinary Studies Program (INDS), rather than the full complement of interdisciplinary programs." The proposed name change from *Interdisciplinary Studies* to *Individualized Study* will clarify the purpose for which this program was originally created, as well as its ongoing (unchanged) academic activity. This clarity will help the efficient functioning of the UMBC campus community, including successful student advising. The title "*Individualized study*" was chosen over "*Individualized Studies*" in order to emphasize the central importance of each individual student's assembling coursework into a coherent program of study.

# Environmental Scan

The proposed name change aligns with nomenclature at other institutions within USM and beyond, both within the Baltimore metro region and nationwide. Within USM, for example, UMCP offers a degree-granting *Individual Studies Program* in the Office of Undergraduate Studies. Towson University offers an *Individually Designed Thematic Option* degree program alongside a variety of other interdisciplinary studies majors (*American Studies, Animal Behavior, Ancient Studies* etc.). Beyond USM USM but within the Baltimore metro region, Goucher College offers an "*Individualized Interdisciplinary major*" among a cluster of interdisciplinary majors. No other programs of similar name exist locally. The pattern sketched above extends and repeats across the nation's institutions of higher education: many (but not all) offer an individualized major. As the program at UMBC approaches APR, three of these external programs are of particular inspiration:

- 1. **The Individualized Studies ("Western") Program at Miami University.** "provides students with the opportunity to develop a personalized plan of study. This interdisciplinary program allows for integrated and intentional learning by each student and culminates with a senior research project that serves as an entry point to graduate study or a rewarding career." (http://miamioh.edu/cas/academics/programs/western/)
- 2. Rochester Institute of Technology School of Individualized Study: "engages in the development of flexible education pathways that support the diverse needs of 21st century learners. We educate the whole individual for personal, professional and civic success." (https://www.rit.edu/academicaffairs/sois/)
- 3. Gallatin School of New York University: "The cornerstone of the Gallatin School is its individualized approach to education. Gallatin puts the individual student first. With the support and guidance of faculty advisers, students design unique courses of study, exploring multiple disciplines or various perspectives on specific areas of study not available in traditional departments" (https://gallatin.nyu.edu/)

The program at UMBC seeks to continue and grow its involvement with the IMP network of Individualized Major Programs (<u>https://impnetwork.wordpress.com/</u>) and its associated annual conference.

### **<u>References</u>**:

Rosental, Alan. Evaluation of the Option II Program at UMBC. (1972)
 e.g. Benson, Thomas C. "Five Arguments Against Interdisciplinary Studies," Issues In Integrative Studies (1982) vol 1, pp. 38-48