

University of Maine System  
Program Integration  
Round Two

Psychology

Below please find a summary of the key points derived by the UMS Chief Academic Officers from the report provided by the **Psychology** program integration team. The team's full report follows the CAOs' summary and recommendation.

## **UMS Chief Academic Officers'** **Summary and Recommendations**

### Psychology

Psychology programs and courses are among the most highly enrolled in the University of Maine System. Four universities offer the bachelor of arts in psychology: UMaine, UMF, USM, and UMPI. These four degree programs together produce more bachelor's degrees than any other academic major in the UMS aside from Nursing and the aggregate of Business Administration and Business Management programs. In a typical year, UMS psychology courses produce more credit hours than any other discipline except Nursing, Biology and Business/Management. Psychology courses play a central role in the general education curricula of all UMS institutions and are required for many majors (e.g., nursing, education, business). As an area of study, Psychology is successful and important to the mission of each UMS campus.

The process of working together on the Program Integration Team enlightened each psychology faculty about the similarities, differences, strengths, and weaknesses of their sister programs on the other campuses. A strong commitment to continued and expanded networking and collaboration among programs emerged from the Program Integration Team work.

Specific recommendations emerging from the Psychology Program Integration Team and endorsed by the CAO Council include the following.

1) **Develop a centralized website for UMS Psychology**

The UMS Psychology website will include information about the UMS psychology programs and courses. It will serve to promote collaboration across campuses and can be used to market options for studying psychology in the UMS. Psychology faculty from each campus will develop the website content. At a minimum, the site should include:

1. **Information about program requirements**
2. **Curricula for each psychology and related program**
3. **Tables with lists of psychology courses at each campus** including information about applicable general education categories, temporal pattern and instructional modalities of course offerings, and transfer equivalencies within UMS.
4. **Marketing materials** for each program.

Projected timeline: Develop and assemble materials December 2016.

2) **Develop materials that provide an orientation to Psychology in the UMS** including print and video resources about the opportunities available at each UMS institution and about psychology as a discipline and related career opportunities.

Projected timeline: Develop materials by September, 2017.

3) **Continue assessment of transfer equivalencies among UMS programs..**

Projected timeline: develop matrix of transfer equivalencies by December, 2016.

4) **Establish common learning outcomes for foundational courses** including social, abnormal, child development, and research methods.

Projected timeline: September, 2018.

- 5) **Recommend a process for consultation and cooperation across campuses on psychology course scheduling.** Coordination of course offerings will help to reduce the number of competing sections of equivalent course and allow for the offering of more specialized courses.

Projected timeline: January, 2017

- 6) **Propose a model for annual UMS psychology conference.** Annual meeting of psychology faculty will promote research and curricular collaboration as well as work session to advance work on initiatives outlined in recommendations 1 through 5. Annual meeting could include student research presentations.

# Academic Program Integration Process

## Psychology Team Report



February 2016

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## **Executive Summary**

Programs and courses in the discipline of psychology are collectively among the most productive in the University of Maine System (UMS). Not only is this true collectively, each psychology program is a robust contributor to, and has developed to strongly embody, the differentiated mission of its institution. Psychology is in the top four of UMS programs with regard to the production of student credit hours. Although only four of seven UMS institutions offer a baccalaureate degree program in psychology, combined these four institutions rank third in UMS in degree production. The graduate program in psychology at the University of Maine (UM) generates the most doctoral degrees of any department at the flagship campus. External reviewers have noted, however, that faculty losses in the two largest UMS psychology departments, at UM and at the University of Southern Maine (USM), may be straining their capability to provide both high quality educational opportunities and sustained high levels of productivity.

Psychology is commonly defined as the scientific study of mental processes and behavior, and as such is a discipline with a scope extending from emphases on biological systems to emphases on social systems. This breadth of scope and attendant diversity of potential applications likely affords more potential for the development of distinctive program niches than is true for most other disciplines. At each UMS institution psychology faculty have built distinctive academic programs in conjunction with faculty from a variety of other disciplines. Recommendations developed by the team are designed to help the program at each institution build and enhance its distinctive niche and serve its constituents while promoting overall UMS accessibility, quality and sustainability.

Psychology is an important component of a liberal education. The scope of the discipline and diversity of applications provides a wide range of employment and career opportunities but also produces some degree of uncertainty in circumscribing areas for projecting workforce demand for baccalaureate level graduates. Data provided by UMS as well as by the Maine Department of Labor clearly indicate continued demand for graduates at the Master and Doctoral degree level. Team recommendations include suggestions to improve progression from undergraduate to graduate studies.

This program integration process has served as the first formal basis for networking and collaboration among psychology programs. The team focused on the directive to be innovative in developing recommendations for a continuing long-term collaborative effort to improve accessibility, quality and sustainability, and to assess foundational courses. To this end, materials and documents from the seven institutions, such as program requirements, sample curricula, and course syllabi were assembled on Google Drive. For some initiatives that were clearly identified as having high proximal benefits, materials were developed by the team that have already had applied value and will have continued utility as the team persists in work with regard to learning outcomes, foundational courses, assessment of course capacity data, exploration of issues in accessibility, transfer between programs, and preparation for graduate studies.



The major overarching recommendation is for continued and expanded networking and collaboration both among programs and with other academic programs. One major multi-faceted collaborative initiative recommended is the development of a centralized website for the discipline of psychology in UMS. A second major collaborative initiative recommended is for team members and others representing the seven UMS institutions to develop online informational modules to promote the academic opportunities relating to psychology at each UMS institution and to elucidate psychology as a discipline and its related career opportunities. Recommendations also include continued assessment of transfer equivalencies, developing a process for consultation and cooperation across campuses in psychology course scheduling, and exploring possibilities to cooperate in developing degree or certificate programs.

Recommendations are designed to improve movement among campuses and to provide better pathways to graduate education. Although there is a current need and projected need in the Maine workforce for more professionals trained at the graduate level, it is likely that additional resources will be necessary to build graduate program capacity in psychology and related disciplines. Campus and system support are recommended for resources, including faculty, to sustain the high level of productivity in psychology programs. The strength of psychology programs in UMS warrant consideration of additional resources in the future as additional opportunities for growth at the undergraduate and graduate level are developed through continued networking and collaboration within and across disciplines. Other areas of support recommended include improved library access across campuses, assistance in website development, the formulation of clear and consistent policies regarding definitions of course delivery modes, and development of procedures needed to ensure that seats in online classes can be allocated in a manner that works well for all campuses.

# **University of Maine System Psychology Program Integration Team Report**

## **Brief Description of Team Activities**

The full Psychology Program Integration team met initially on September 26, 2015. Three major facts became apparent as early as that first meeting with regard to the role of the discipline of psychology in the University of Maine System: 1) we are a strongly robust contributor, in our courses and our programs of study, to the mission of each campus; 2) our programs have developed to strongly embody the differentiated mission of each campus; and 3) our collaboration in this process would afford multiple clear proximal benefits for program accessibility and quality for our students, as well as potential distal benefits for accessibility, quality and increased variety - while promoting financial sustainability. The team met subsequently five times face-to-face or via Google Hangouts. Most other communication was conducted via email. The team focused on the directive to be innovative in developing recommendations for a continuing long-term collaborative effort to improve accessibility, quality and sustainability, and to assess foundational courses. To this end, information materials and documents from the seven campuses, such as program requirements, sample curricula, and course syllabi were assembled on Google Drive. For some initiatives that were clearly identified as having high proximal benefits, materials were developed by the team that have already had applied value and will continue to be useful as the work of the team progresses to implementation of approved current recommendations as well as the creation of additional opportunities.

## **Overview of the Discipline of Psychology in the University of Maine System**

### **Current Productivity**

The contribution of courses and programs in psychology is highly important in the curriculum of each university. Psychology courses satisfy general education requirements and foundational and advanced courses serve students in a wide range of other academic programs in addition to psychology. UMS degree and certificate programs in psychology are presented in Appendix I.

Four universities offer a Bachelor of Arts degree in psychology. Collectively these four institutions (in order of size, UM, USM, UMF and UMPI) have: 1) performed in the top four of UMS programs with regard to productivity in number of majors, FTEs, and credit hours delivered; and 2) generated more Bachelor degrees over the period 2010-11 to 2014-15 than any other academic majors in the UMS aside from Nursing and an aggregation of Business Administration and Management programs. These data are shown in Tables 1 and 2 below for the UMS programs with the highest numbers of majors, FTEs, credit hours, and Bachelor degrees. These programs, in addition to Psychology, are Nursing, Biology, and Business Administration and Management.

**Table 1. Major Counts, FTEs and Credit Hours generated in Psychology in 2014-2015 in relation to other leading UMS programs<sup>1</sup>**

	Major Counts			FTE			Credit Hours		
	SU'14	FA'14	SP'15	SU'14	FA'14	SP'15	SU'14	FA'14	SP'15
NUR	427	1149	1054	180	937	847	2692	14050	12704
PSY	247	916	893	85	750	728	1284	11406	11061
BIO	284	1038	944	105	847	776	1580	12776	11694
BUS A/M <sup>2</sup>	449	1227	1250	163	904	914	2439	13563	13717

**NUR=Nursing; PSY=Psychology; BIO=Biology; BUS A/M= Business Management and/or Administration.**

<sup>1</sup>Data from Program Integration 2014-2015 Majors and Double Majors with Academic Plan Overlaps, 9/18/15

<sup>2</sup>Business Administration/Management includes Business Administration (UM, UMA, UMM, USM), Business Management (UMFK), Management (UMA), General Management (USM), and Business & Entrepreneurial Studies (UMM). Business Management-Accounting at UMFK was included in Business Administration/Management because it is a concentration of Business Management at UMFK.

**Table 2. Bachelor Degrees Conferred in Psychology in relation to other leading UMS programs for the period 2010-2011 through 2014-2015<sup>1,2</sup>**

	10-11	11-12	12-13	13-14	14-15
NUR (4)	246	253	290	254	263
PSY (4)	214	271	238	227	215
BIO (7)	130	128	122	142	155
BUS A/M <sup>3</sup> (6)	270	278	273	262	270

**NUR=Nursing; PSY=Psychology; BIO=Biology; BUS A/M= Business Management and/or Administration.**

<sup>1</sup>Data from Program Integration 2010-2011 through 2014-2015 UMS Degree Completions with Double Majors by year, 9/18/15

<sup>2</sup>Number of universities with academic major(s) in parentheses

<sup>3</sup>Business Administration/Management includes Business Administration (UM, UMA, UMM, USM), Business Management (UMFK), Management (UMA), General Management (USM), and Business & Entrepreneurial Studies (UMM). Business Management-Accounting at UMFK was included in Business Administration/Management because it is a concentration of Business Management at UMFK.

Data for number of Bachelor degrees in Psychology awarded at each UMS university for the period 2010-11 through 2014-15 are presented in Table 3. Psychology is among the top degree producers at each institution and differences in degrees awarded generally parallel the size of the university.

**Table 3. Bachelor degrees conferred in Psychology for the period 2010-11 through 2014-15, by university<sup>1</sup>**

	10-11	11-12	12-13	13-14	14-15
UM	108	127	122	111	101
USM	48	73	65	58	52
UMF	50	55	32	44	49
UMPI	8	16	19	14	13

<sup>1</sup>Data from Program Integration 2014-2015 Majors and Double Majors with Academic Plan Overlaps, 9/18/15

UM, UMF, and UMPI also offer an academic minor in Psychology. These programs too are popular at each university. At UM more students are minoring in Psychology (n = 119) than in any other program aside from Business Administration. UMF has 32 students minoring in Psychology. An academic minor in Psychology has only recently been approved at USM so students are just becoming aware of this opportunity there.

Although a Psychology major is not offered at UMM, UMA, and UMFK, psychology curriculum is essential to popular Bachelor degree programs (see Table 4). At UMM the Psychology and Community Studies major generates roughly 20% of all Bachelor degrees awarded. At UMA psychology curriculum is part of the Bachelor program in Social Sciences, which includes both a concentration (currently 28 students) and a minor in Psychology (currently 147 students). UMA's Psychology courses are also important to the Bachelor programs in Liberal Studies and in Mental Health and Human Services which generate, respectively, approximately 65 degrees and 100 degrees annually. At UMFK psychology curriculum is critical to the Bachelor programs in Behavioral Science and Social Science.

	<b>10-11</b>	<b>11-12</b>	<b>12-13</b>	<b>13-14</b>	<b>14-15</b>
UMM <sup>2</sup>	14	12	12	18	18
UMA <sup>3</sup>	11	14	2	11	16
UMFK <sup>4</sup>	14	8	9	12	11

<sup>1</sup>Data from Program Integration 2014-2015 Majors and Double Majors with Academic Plan Overlaps, 9/18/15

<sup>2</sup>UMM BA in Psychology and Community Studies

<sup>3</sup>UMA BA in Social Science

<sup>4</sup>UMFK BS in Behavioral Science and Social Science

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This productivity has been sustained despite a decline in number of UMS psychology faculty overall, particularly in the two largest programs, UM and USM, and at UMA. At UM, faculty numbers have declined by roughly one-third (from 19 to 13.9 overall, 17 to 11 tenure/tenure eligible) since 2009. This faculty attrition and the low current number of faculty in the area of clinical psychology have resulted in a special site visit by the American Psychological Association (APA) Council on Accreditation in Spring 2016 to assess the status of the doctoral clinical program.

Both USM and UMA have also experienced a reduction in faculty despite the continued high program demand noted above. UMA notes a 40% reduction in tenure/tenure eligible faculty (10 to 6) over the past decade. External reviewers for the 2015 USM self-study and academic program review noted a substantial reduction in number of USM faculty since 2010 (from 14 to 7 overall, 11 to 7 tenured) a level that threatens the department's capacity to sustain its current productive program, and recommended planning additional hires. Collaboration developed through the continuing program integration process should provide some systemic benefit for maintaining and improving accessibility and quality across programs. However, prioritization of additional faculty positions in Psychology programs seems warranted given their very high level of productivity.

### **Networking and Collaboration**

The program integration process has served as the first formal basis for networking and collaboration among programs relating to the discipline of psychology. The relationship of the

seven campuses has been what was characterized as a marketplace model in information provided by UMS to the team. That is, the programs in psychology have developed and functioned independently with very little interaction. Most of the interaction among faculty and students from different UMS campuses has been at state and regional professional conferences. This is not surprising given the emphasis on research in psychology because these meetings (e.g., Mainely Data, the Maine Psychological Association, the Maine Society for Neuroscience, and the New England Psychological Association), provide excellent opportunities for students to learn more about the process of research and build critical thinking and communication skills. To an extent, faculty have been invited to present colloquia at other campuses, to serve as external reviewers for the promotion and tenure process at other campuses, and to serve as external reviewers for UMS program reviews. This team recommends increased levels of these activities as one means by which programs can further build collegueship, but also recommends more systematic continued networking to improve ease of student movement among programs and preparation for graduate study, communication about opportunities such as distance-modality courses offered by other UM campuses, and to plan other collaborative initiatives.

### **Mission Differentiation**

The UMS programs relating to Psychology have developed in a manner commensurate with, and are important contributors to, the mission of their campuses. The broad scope of Psychology, which may be defined as the scientific study of mental processes and behavior, extends from emphases on biological systems to emphases on social systems. This breadth of scope and the attendant diversity of possible applications of psychology likely affords more potential for the development of distinctive program niches than is true for most other disciplines. At each UMS institution, psychology faculty have built distinctive academic programs in conjunction with faculty in a variety of other disciplines.

The psychology department at UM plays an important role in the graduate education mission as well as the undergraduate education mission in the College of Liberal Arts and Sciences at the flagship UMS institution. With regard to graduate education, the Psychology department awards more doctoral degrees than any other degree granting program. As such, UM's Psychology department makes a significant contribution to the continued classification of UM as a RU/H (high research activity) institution by the Carnegie Foundation. UM's graduate programs also play a unique and important role at the undergraduate education level. The graduate programs enable a hierarchical mentoring model in the department involving the interaction of faculty and both undergraduate and graduate students. This model allows undergraduate psychology majors to be involved with cutting edge research throughout their program of study. A strong collaboration with biology allows UM to offer the Neuroscience minor. Department faculty were instrumental in establishing the Maine Society for Neuroscience, and almost half of department faculty hold appointments in the Graduate School of Biomedical Sciences and Engineering (GSBSE). Much of the over \$10 million in extramural grant funding awarded to department faculty since 2000 has been in areas of biomedical research. The department is positioned well to further support UM priorities articulated in the Blue Sky Plan, which relate to needs identified for the State of Maine, to expand education and research in the areas of aging and biomedical sciences.

The psychology program at USM is in the College of Science, Technology and Health. The department contributes strongly to USM's institutional mission, dedicated "to providing students

with a high quality, accessible, affordable education." Focus is on educating students on the fundamentals of scientific theories and research methods within the field, and preparing them for graduate level studies and professions where they can utilize the wide array of skills and knowledge that the degree confers: the ability to systematically analyze problems, use scientific inquiry and critical thinking to evaluate information, and understand social dynamics and the ways we learn and process information. The program provides for a broad-based and rigorous undergraduate degree in Psychology, both as a major and a minor, consistent with the APA's guidelines for the undergraduate psychology major. Faculty engage students in course-based and non-course-based research, commit to high-quality academic and career advising of current and prospective students, conduct research programs and teaching innovations that have regional and national impact, and provide services that benefit the local community and the people of Maine more broadly. Academic programming is offered at three USM campuses, Portland, Gorham, and Lewiston-Auburn.

The psychology program at UMF strives to realize the vision of UMF's mission as a college "that prepares students for engaged citizenship, enriching professional careers, and an enduring love of learning." The program offers a nurturing academic environment in which undergraduate students can explore the field of psychology, develop long-term mentoring relationships, and deepen their understanding of themselves and their local and global communities. A humanistic and holistic frame of reference guides both pedagogy and curricular development. The provision of experiential learning activities in the community and interdisciplinary cooperation are emphasized. The program offers a MHRT/C counseling track, an Interdisciplinary Business Psychology major, and a Business Psychology concentration. An Interdisciplinary major in Aging Studies will be introduced in 2016.

The psychology department at UMPI is oriented toward preparing students for direct employment within the state or, for those with higher degree aspirations, preparation for graduate school. Three concentrations are offered within the major with a prescribed list of courses required for a "Graduate Track" designation if chosen, a General Concentration, a Biopsychology Concentration, and a Business Psychology concentration. The latter two concentrations are designed for students who are interested in laboratory research or graduate training or to enter the business or human resources workplace or to be competitive in applications to graduate programs in Industrial Organizational Psychology. There is an emphasis on small class sizes geared for acquiring proficiency in research, psychological knowledge and applied skills. UMPI also offers an entirely on-line psychology degree (General Concentration only) for students who are place bound or favor an entirely on-line educational experience. The program is flexible in accepting courses from other UMS campuses to supplement or speed completion of the online degree requirements and further serves the area via the Houlton Center.

The Psychology and Community Studies (PCS) program at UMM emphasizes community engagement and is a signature part of UMM's identity as Maine's Coastal University. This student-centered, interdisciplinary program includes coursework in psychology, anthropology, sociology, and economics. PCS students and faculty promote social development for rural, coastal communities through carefully scaffolded community-based service learning projects. Students can complete the program on-campus or online and still experience the benefits of a deeply engaged program of study. UMM offers concentrations in applied psychology and disabilities in youth, minors in Counseling, Substance Abuse Services, Psychology, and Cultural Anthropology, and the MHRT certification.

Psychology at UMA is housed in the Social Sciences program, which offers a Social Sciences degree, and both a Psychology concentration and minor. The mission of UMA is to "[transform] the lives of students of every age and background across the State of Maine and beyond through access to high-quality distance and on-site education, excellence in student support, civic engagement, and professional and liberal arts programs." University College is an administrative unit of UMA which helps to provide psychology programming at the Bangor campus, at 8 outreach centers (Brunswick, Ellsworth, East Millinocket, Houlton (UMPI), Norway/South Paris, Rockland, Rumford, and Saco), and at 56 affiliated course receiving sites in smaller communities. The full range of instructional modalities is employed to maximize accessibility for students who are primarily non-traditional, many of whom are parents, work full-time, and/or are pursuing a new career path after having already gained experience in the workforce. Psychology at UMA is necessarily part of a broader interdisciplinary understanding of the human condition within social systems.

At UMFK Psychology is housed within the Behavioral Science Program. The program has strong relationships and works collaboratively with area agencies and providers, which affords increased internship and service-learning opportunities in fulfillment of the university mission to offer professional education and career pathways that serve the needs of rural Maine. The program has a Human Services track designed to prepare students for direct employment. In the process of completing their degree, students have the opportunity to obtain several professional credentials including a conditional Social Work license, Certified Alcohol and Drug Counselor certification and Mental Health Rehabilitation Technician certification. A graduate track prepares students for advanced learning in a number of behavioral science disciplines. The emphasis is on developing critical thinking and research skills that are broadly applicable. The program's size allows it to be innovative and permits faculty to develop one-on-one mentoring relationships with students.

The recommendations the team has developed are designed to help each institution build and enhance its distinctive niche and serve its constituents while also promoting overall UMS accessibility, quality and sustainability.

### **Course Capacities**

Two informational documents were provided by the team for review with regard to psychology courses offered, for the period 2010-2014 and for the 2014-15 academic year respectively. The first document included all psychology courses, the second presented data for 100 level and 200 level courses only. For each psychology course offered at each campus, data included the designated maximum enrollment, the actual enrollment, and the resultant percentage of capacity utilized. Four themes emerged in review of these data: 1) increased attention to enrollment numbers in UMS institutions over the past several years have already resulted in changes in curriculum and scheduling to promote sustainability; 2) it is primarily distance education and Winter and Summer session classes that show apparent spare capacity; 3) there are respects in which these capacity data can be misleading; but 4) the data provide an important basis for further planning.

In team discussion it was noted that although most enrollment maxima are established on the basis of pedagogical criteria, it is obvious that some are influenced by other factors as well. Many instances of apparent spare capacity are direct reflections of efforts to maximize accessibility. For instance, courses offered via interactive television are typically made available to the over 60

centers and sites of the UC network. Other patterns of apparent spare capacity also involved providing access to students at off-campus sites, for instance UM courses offered via videoconference between Orono and the Hutchinson Center in Belfast and UMA courses offered live at UC centers. The emphasis in each case is to accommodate as many, for the most part non-traditional, students as possible.

These capacity data were useful for curriculum optimization discussions beyond identifying issues with regard to setting course enrollment maxima and the enrollment patterns mentioned above. These data also further informed the discussion about mission differentiation as a basis for tailored marketing of foundational courses, such as General/Introductory Psychology. Multiple sections of General/Introductory Psychology are offered each semester via various instructional modalities. It became apparent in discussion that the majority of this array of offerings is likely necessary to optimize accessibility and serve the diverse interests of prospective students. Further they serve to initiate the processes of orienting students to the programmatic emphases of each campus and building a sense of cohesion among students and identification with the program, which are all important for student retention. Thus, these multiple offerings benefit students by allowing more of them to choose a preferred modality for this introductory course and start to become engaged with a UMS institution while still affording the ability to straight forwardly transfer to another UMS institution with the requisite background in content and learning outcomes.

Even with these considerations of mission differentiation however, continued monitoring and review of capacity data will be important not only for on-campus, but also for team discussions of curriculum optimization. Current discussions have already led to the planned elimination of at least one typically offered distance section of General/Introductory Psychology in 2016-17 and further scrutiny of possibilities has become highly salient. Also, spare capacity was evident with regard to Summer (and Winter) session courses in 2014-15. Further, the data presented in Table 1 indicate that the percentage of credit hours generated during the Summer relative to the academic year is lower for Psychology than the other most productive UMS programs. These data suggest the possibility that collaboration to plan courses offered as well as their timing could be beneficial.

### **Learning Outcomes and Foundational Courses**

Discussion of programmatic learning outcomes and foundational courses centered on the American Psychological Association (APA) GUIDELINES for the Undergraduate Psychology Major, Version 2.0, published in August 2013.

<http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf>

This document presents a comprehensive set of five aspirational learning goals. For each learning goal, a range of associated outcomes is stipulated, as follows:

1. **Knowledge Base in Psychology** – developing the capability to describe key disciplinary concepts, principles, themes, content domains and applications.
2. **Scientific Inquiry and Critical Thinking** – developing the capability to use scientific reasoning and innovative and integrative thinking and problem solving in relation to psychological and other research and phenomena.
3. **Ethical and Social Responsibility in a Diverse World** – developing the capability to apply ethical standards, to improve skills for interpersonal relations, and to adopt values conducive to community building.



4. **Communication** – demonstrating effective writing, presentation, and interpersonal interaction skills.

5. **Professional Development** – exhibit self-efficacy, self-regulation, project management, and teamwork development skills, as well as fitting career goals and a professional direction.

The APA provides differentiated indicators associated with achievement of these outcomes for the foundational level (2 years) and baccalaureate level (4 years), a set of attributes that may be inferred from successful demonstration of achievement, and assessment implications (and a range of potential instruments) for each indicator. There is explicit recognition in these APA guidelines of the range of differentiated missions across programs and the importance of being able to programmatically tailor the recommendations and the process of assessment as appropriate. Team discussion indicated a broad general agreement that the APA guidelines are a valuable basis for continued planning. Applicability is of course in part a function of whether the university has an undergraduate psychology major. The four UMS universities that have the psychology major have at least broadly endorsed these or similar learning outcomes. Adoption of specific indicators and assessment planning is at different levels of development and that process at each campus will likely benefit from continued networking.

The APA guidelines also acknowledged the importance of mission differentiation in the determination of what courses should be considered as foundational. General/Introductory courses are clearly foundational, designed to provide a broad background in the range of content areas in the discipline as well as initial inculcation of critical thinking skills, application of ethical standards and other proficiencies. The team chose a set of seven areas to examine further for consideration based on the APA guidelines. In addition to General/Introductory, these areas are abnormal psychology, social psychology, life-span developmental psychology, psychological statistics and research methods, biological psychology, and cognitive psychology. Clearly a major impetus for this discussion is the implications that it has for which courses should be offered in the first two years and how this impacts the ease with which UMS students can transfer among programs. Therefore we have developed materials to help assess which courses are available at each campus, at what level they are offered, and whether currently established course equivalencies appear accurate. These materials will be valuable as we continue to collaborate in the program integration process.

#### **Issues in Accessibility, transfer between programs, and preparation for graduate studies**

Early in team deliberations it became apparent that a key first step to promote accessibility to UMS programs was to improve the accessibility to information about the programs. Although the UMS website has the useful listing of degree programs that we have included in this report (Appendix I), there was apparently no site, or straightforward compilation of materials that: 1) could be accessed by a prospective student to view the options for psychology-related UMS programs with "one-click" ease; 2) could be accessed by prospective or current UMS students to view requirements and sample curricula for all UMS programs in one place; and 3) could provide information about transfer equivalencies among all UMS programs in one place. The current transfer equivalency module allows only the viewing of equivalencies between two universities at a time.

We determined that gathering relevant informational materials and documents from each university, such as program requirements, sample curricula, and course syllabi was an important initial step for providing such a consolidation of program information, and have done so on Google Drive. A

spreadsheet was developed that provides information about the full range of courses offered at each campus, the temporal pattern of how it is offered, the modalities of instruction, the general education requirements met, and the transfer equivalent of each course at other campuses. This spreadsheet (see Appendix II) has already been useful to the team and will serve to provide prospective and current students with legible access to this range of information. In order to promote the team's efforts on evaluating foundational courses with regard to transfer equivalents and ease of movement among campuses a set of tables (see Appendix III) was developed that show established transfer equivalents for a given course across all seven campuses in a single matrix. This work has already revealed a few obvious errors in the course transfer equivalencies currently shown in the UMS matrix found on Maine Street. These resources developed by the team will be directly helpful for review of the matrices newly generated by UMS for the work of the Round 2 Program Integration teams. These matrices, which were recently received by the team in a vowedly first draft form, will be very useful once perfected in conjunction with the spreadsheet developed by the team (Appendix II) in promoting accessibility.

Review of the tables presented in Appendix (App.) III also makes some considerations apparent with regard to foundational courses, ease of transfer among UMS institutions, progression to graduation, and preparation for graduate study. One course that is clearly foundational is General/Introductory Psychology (App. III, Table 1). One university, USM, requires a 2-semester sequence of General Psychology but the other six institutions require a 1-semester course only. Because at each UMS institution these are 100 level courses this difference in approach presents relatively minimal issues for ease of transfer but warrants further discussion. None of the other courses being discussed by the team as foundational are uniformly at the 100 level or 200 level across all seven campuses. Social Psychology (App. III, Table 2) is a 200-level course at four institutions but higher level at the other three institutions. Similarly Abnormal Psychology (App. III, Table 3) is a 200-level course at five of seven institutions. At least two courses that can be considered as foundational (Biological Psychology, App. III, Table 6 and Cognitive Psychology, App. III, Table 7) are 300-level or above where currently offered. The team has gathered representative course syllabi from each university in order to further assess their equivalence.

Further discussions of our programs and reviews of these materials will further clarify whether any of these differences represent an actual impediment to movement among campuses. However, it is already clear that more opportunities for students to take a transferable course in psychological statistics (App. III, Table 4), especially early in their program of study, would be beneficial for ease of transfer among programs as well as for helping to prepare more of our students for graduate study. The team will further discuss research methods courses (App III, Table 5). It is also apparent that more of our UMS students should have access to a course in life-span development (App. III, Table 8), or adulthood and aging, given the UMS-wide emphasis on aging.

## **Employment and Careers**

The study of psychology is important to a liberal education. The Association of American Colleges and Universities generated a 2015 report on *The Economic Value of Liberal Education*. <https://www.aacu.org/leap/economiccase>. This report provides a strong argument for the broad benefits, including economic benefits, of a liberal education that builds the communication and

critical thinking capabilities and the ethical and other characteristics endorsed by UMS Psychology programs as learning outcomes for our students.

The UMS provided more specific employment and job postings data on areas relating to Psychology for the Program Integration team. These data indicate a clear need to help more psychology majors pursue Master's level education. As Table 5 shows, over the past 5 years, schools in the state of Maine have produced a total of 136 graduates (average of 27 per year) with a Master's level degree in Psychology or closely related field. However, as Table 6 shows, this falls significantly short of the employment needs in the state of Maine for workers with a Master's level education in Psychology or closely related field. Average employment openings for such workers is projected to be 57 per year over the 2012 to 2022 time period.

**Table 5. Masters Degrees Awarded in Maine 08-09 through 12-13**

Discipline	All Schools, All Years combined	UM System, all years combined
42.99: Psychology, Other	20	0
42.28: Clinical, Counseling and Applied Psychology	66	51
19.07: Human Development, Family Studies and Related Services	26	26
42.01: Psychology, General	24	24

It is more difficult to determine if the number of psychology majors at the bachelor level in the state of Maine needs to be increased based solely on the employment and jobs postings data. As discussed in the most recent APA GUIDELINES for the Undergraduate Psychology Major (Version 2, Aug 2013) [link to document provided above], the ideal undergraduate psychology program is

**Table 6. Employment and Employment Projections in Maine**

Occupation Title	Employment 2012	Employment 2022	Percent Change	Average Annual Employment
Healthcare Social Workers	685	776	13.3%	23
Mental Health Counselors	585	660	12.8%	20
Community and Social Service Specialists, All Other	258	280	8.5%	9
Marriage and Family Therapists	87	93	6.9%	3
Counselors, All Other	42	45	7.1%	1
Epidemiologists	30	31	3.3%	1

tasked with preparing undergraduate students for a career directly related to psychology as well as "non-psychology" careers that require natural science and/or social science dimensions. In fact, this merging of methodological and statistical rigor (the National Institute of Health and the National Science Foundation have classified psychology as a STEM discipline) in both a biological and social science setting uniquely sets psychology majors apart from many of their colleagues in either a science or a social science major. Because of this breadth in training "no listing of possible

psychology-related jobs can be exhaustive or completely accurate (APA GUIDELINES, pg 65)." Never-the-less, Appendix IV lists employer job postings in the state of Maine in 2014 for 40 of the over 150 potential careers for a bachelor's or higher degree in psychology as outlined in Appendix E of the APA GUIDELINES. As can be seen in Appendix IV, there were 7031 job postings in 2014 in the state of Maine for which a bachelor in psychology would be beneficial, significantly higher than the average number of students graduating with a bachelor degree from a school in Maine over the last 5 years: 588.

With regard to doctoral level training, according to a recent Maine state workforce report, (<http://www.maine.gov/labor/cwri/publications/pdf/2014HealthOccupationsReport.pdf>) Maine has 22 % fewer psychologists per 1000 residents than the nation as a whole and 70% of them are above age 50. As the only accredited doctoral program in the state, the UM clinical program plays a vital role in meeting this need.

It is clear from these data that for all degrees of academic preparation in psychology, mental health jobs and careers represent a major sector. The importance of having sufficient numbers of appropriately trained workers in this sector is illustrated by data from the Center for Disease Control (<http://www.cdc.gov/mentalhealthsurveillance/index.html>), that estimate the economic cost of mental illness in the United States to be \$300 billion as of 2002. Further, data provided for the State of Maine estimate prevalence in 2008 of lifetime diagnosis of depression to be 20.9% and of lifetime prevalence of anxiety to be 16.7%. These estimates represent an increase of 1.0% and 0.6%, respectively in prevalence for these mental health diagnoses over a 2-year period, since 2006.

### **Recommendations**

The major overarching recommendation from the Psychology team is for continued and expanded networking and collaboration both among programs, and with other academic programs, as a means to enhance quality, expand access, develop enrollment increases and reduce costs. Each UMS psychology program serves an important role in realizing the mission of its campus and enjoys high student demand relative to its campus size. Our recommendations take campus differentiators into account and start to move us toward better alignment across institutions, better alignment for the progression from undergraduate to graduate study, and providing more opportunities for our students.

Many of the specific initiatives recommended for further work include continued data and input collection and review for the production of materials that we envision for a centralized website as well as broader dissemination. Success in these initiatives should be evident through such objective indicators as the number of students enrolled in our programs and courses, student retention, number of graduates and time-to-graduation, as well as in program learning outcomes.

The work of the team has made it apparent that continued networking and collaboration has clear proximal and probable distal benefits for improving the accessibility of our programs to students, the quality of our programs, and the sustainability of our programs individually and collectively. Proximal benefits can clearly be realized through networking and better leveraging of distance technologies. Actualizing probable distal benefits will require persistence in our collaborative efforts. In addition, it is likely that new ways to serve our students will become apparent as we

plan and prepare our current initiatives and have more opportunity for networking with related UMS disciplines. Team recommendations include:

**A. Develop a centralized website for UMS Psychology - FY18**

We believe that elements of this centralized website have the potential to promote accessibility, enhance quality and improve sustainability. We will look forward to working with the UMS Director of Web Technology and others in the development process. One element is to provide a single site at which existing information about UMS programs is available. We have assembled many of these materials on our Google Drive team site in order to facilitate consideration of ways to make them more legible as a set and to be able to make them more broadly available for use while a website is in development. These materials should clearly improve accessibility so the team will plan to continue to:

1. **organize information about program requirements** relating to the discipline of psychology at each campus. **FY17**
2. **update and assemble sample curricula** for each of these programs **FY17**
3. **finalize tables with lists of psychology courses at each campus** which provide information about applicable general education categories, temporal pattern and instructional modalities of course offerings, modalities, and transfer equivalencies within UMS (see Appendix II). **FY16**
4. **organize current marketing materials** for each program. This will include available brochures, flyers, and website descriptions. **FY 17**

**B. Develop materials that provide an orientation to Psychology in the UMS (FY18)**

There are two related goals in this area. The first goal is to develop **print and video resources** (begin **FY17**) designed to provide information **about the opportunities available at each UMS institution** for students interested in psychology. These resources would be similar to those produced for institutional recruitment, probably including students, alumni and faculty discussing each program - essentially a means to make prospective and current students more aware of the differentiated possibilities at each campus as a first step toward accessibility. The second goal is to develop **print and video resources** (begin **FY17**) designed to provide information **about psychology as a discipline and related career opportunities**. The scope of the discipline of psychology and the array of potential career opportunities associated with the study of psychology was discussed earlier in the document. Although each UMS program works to make students aware of this complexity with regard to the level of academic degree attainment required for particular careers, there is team consensus that there is room for improvement and that our collaborative effort in this area can be beneficial.

The team has discussed alternative means to achieve these goals. One approach considered is the development of a one-credit online or hybrid course that would incorporate orientation to the discipline and to UMS programs. The second approach is the development of separate online modules, length to be determined, for each purpose. At present the team is leaning toward the

second approach because **use of online modules seems to afford more versatility**. Modules can be posted on the centralized web site and publicized (or provided) to advisors, instructors and guidance counselors at high schools and community colleges as well as within UMS. The module about psychology as a discipline and careers would be available to instructors at each campus for use in advising courses and in introductory and other psychology courses.

Another reason the development of multiple modules seems preferable at least as an initial step is based on results from a query to psychology departments about approaches currently taken to orienting psychology students to the major. Several respondents (e.g. Xavier University, Texas State) indicated that a full one-hour course seemed to be more than was necessary and that they were considering or in the process of revising this approach.

The team believes that the development and use of these materials will **promote both accessibility and sustainability**. Awareness of an opportunity is the necessary first step to making it accessible. These materials should promote awareness of programs available at each institution and how they align with career options. As such, these materials may promote higher overall levels of enrollment in UMS psychology programs, thus promoting sustainability. In addition, these materials will be valuable in helping students choose the program that best suits their interests. This fit between student interests and aspirations and program qualities promotes retention, also important to sustainability.

#### **C. Continue assessment of transfer equivalencies among UMS programs (FY17)**

As discussed earlier in the report, the team prepared a spreadsheet (Appendix II) that provides information about the full range of courses offered at each campus and includes the transfer equivalent of each course at other campuses, as well as a set of tables (Appendix III) that show in a single matrix the established transfer equivalents for a given 100 level or 200 level course across all seven campuses. We recommend continued collaboration to use these resources in conjunction with review of syllabi to **comprehensively assess transfer equivalencies** across UMS psychology courses. This information developed will be important for optimizing accuracy of the transfer equivalence matrices newly generated by UMS, which in turn will be very useful once perfected in promoting accessibility across UMS institutions.

#### **D. Continue process of deliberation on foundational courses and on establishing, improving, and assessing learning outcomes (FY18)**

There is broad general agreement that the 2013 APA GUIDELINES are a valuable basis for continued discussion about learning outcomes and foundational courses. It is unclear to what degree consensus will be reached on adoption of specific indicators and assessment planning given the considerable differences among even the four programs that offer the psychology major. Nevertheless, progress in these processes at each UMS institution should benefit from the sharing of information via continued networking.

#### **E. Develop a process for consultation and cooperation across campuses on psychology course scheduling. The clear proximal benefit will accrue from an emphasis on courses**

**offered online and by other distance education modalities. It is possible that the networking process could also lead to development of collaborative courses (FY18)**

We will publicize within each program the Summer 2016 classes offered across UMS institutions, especially classes offered online. Although students can find this information on Maine Street, actively promoting awareness of the courses scheduled improves accessibility. To the extent that courses publicized are upper level specialty courses, providing more such opportunities for students, this effort also promotes quality. If we collectively attract more students, more revenue will be generated. This will also be the collaborative approach taken for Fall 2016 classes.

There was distinct agreement on several factors relating to review and development of course offerings and their methodologies. Quality of teaching and learning is critical. Investments and incentives will be necessary to support faculty and learning design in developing “best practice” course methodologies. Initially, flexibility to explore various processes and methodologies will be required. The process will be incremental, evolving and adapting over time.

Discussion and planning will be abetted through clear and consistent policies regarding definitions of course delivery modes. For instance, online programs or courses that require students to come to campus for any activity (e.g. exams) cannot be advertised as 100% or fully online. UMS member campuses all have slightly varied terminology for the same modalities. A common set of definitions is required for all communications and planning moving forward.

The alignment of the academic calendar system-wide will afford greater opportunity for cooperation in class planning and scheduling across campuses. Consistency across campuses in Winter Term and the timing of some online summer sessions will enable further progress in coordination of scheduling that can improve accessibility, quality and sustainability through:

a. **reduction in number of competing sections of a particular course.** For example, there are multiple sections of General/Introductory psychology offered via various modalities each term, as discussed previously. Through discussion and negotiation it is likely that in some terms the number of sections offered in competition can be reduced. In the summer, such discussion could result in more classes being offered in different sessions rather than in competition. The course capacity data generated by UMS were helpful as provided but could be even more useful with differentiation of courses instructed by core faculty and adjunct faculty.

b. **inclusion of more specialized courses.** Reduction in competing sections of some courses will help to free up instructors to offer other, often more specialized courses. There are some such courses in psychology that are not offered more frequently primarily because of perceived insufficient demand. Consultation on patterns of when classes are typically offered will allow for these classes to be offered more strategically. The pooling of demand and the better publicizing of available alternatives across campuses will make such classes accessible to more students, enhance the quality of curriculum at all campuses, and be cost effective.

The team has already determined that, given the strong emphasis on research in psychology, having a transferrable psychological statistics course offered online at least annually will improve movement among UMS programs as well as preparation for a range of graduate

programs for our students. Based on the evidence we obtain as to the efficacy of this scheduling initiative we will determine whether offering other important courses such as research methods in psychology and life-span development in this manner will be beneficial as well.

#### **F. Examine programs at institutions in Maine and other New England states (FY17)**

Data indicate that there may be opportunity for additional recruitment of prospective undergraduate students who are accepted at UMS institutions, but choose to matriculate at other institutions outside UMS. We recommend further examination of psychology programs offered at these institutions to assess whether there is potential for UMS collaboration to enhance our academic portfolio and improve our competitive position. Better publicizing programs through the centralized website should be helpful. Another initial step in this regard is to better publicize the recently developed collaborative online curriculum for MHRT certification.

Although not competitive with UMS institutions with regard to programs in psychology, it may be noted that in Spring 2016 the seven Maine community colleges are offering over 50 sections of General/Introductory Psychology (20 sections at Southern Maine Community College), 12 sections of Abnormal Psychology, and over 65 sections of other psychology classes.

#### **G. Continue to build and enhance networking capabilities through increasing numbers of colloquia offered by faculty at other UMS campuses (FY17)**

We will build collegueship and provide students opportunity to experience more diversity of expertise in Psychology, which will **enhance program quality** across UMS.

#### **H. Explore possibilities to cooperate in developing or expanding degree and certificate programs. This will entail increased networking with other disciplines such as Social Work, Counseling and Education, Biology, Business, and Sociology (FY17)**

Interdisciplinary collaboration is apparent at each UMS institution. At UM cooperation between Biology and Psychology enables an undergraduate academic minor in neuroscience. At both UMF and UMPI there are undergraduate programs involving collaboration between Psychology and Business. There are also some collaborative programs that involve transition from undergraduate to graduate study. For instance, at UM there is a five year BA-MBA program and a 4+1 Master degree program in psychology. UMF will be piloting 3+2 Master degree programs in collaboration with Counseling and Social Work at USM in Fall 2016. The data on employment and careers provided by UMS and reviewed earlier in this report clearly indicate projected demand in Maine for mental health professionals trained at the Master and Doctoral level. Several recommendations presented above are designed to improve the competitiveness of more UMS undergraduate students for graduate study. However, networking with other disciplines in UMS will be necessary to determine if they have sufficient capacity in their graduate programs to accommodate more students in order to meet this projected demand. The UM doctoral programs in psychology would clearly require additional faculty and other resources in order to train a greater number of doctoral students .



### **Capabilities Policies, Other Necessary Requirements**

- A. Prioritize psychology programs for additional resources due to their continued high level of productivity. In particular, programs currently strained due to faculty attrition should be prioritized for additional faculty hires.
- B. Prioritize resources to support faculty and learning design initiatives to develop best practice course methodologies.
- C. Develop clear and consistent policies regarding definitions of course delivery modes.
- D. Assistance in developing a centralized web site.
- E. Improved library capability for students and faculty across all institutions
- F. Seats in online classes reserved for students from other campuses
- G. Provide course capacity data that differentiate between courses instructed by core faculty and adjunct faculty.

## Appendix I

### UMS Academic Programs in the Discipline of Psychology

Campus	Undergraduate Degree Programs	Description
UM	Bachelor of Arts	Psychology Major -Concentration in Abnormal/Social Psychology -Concentration in Developmental Psychology -Concentration in Biological/Cognitive Psychology Psychology Minor
USM	Bachelor of Arts	Psychology Major
UMF	Bachelor of Arts	Psychology Major -MHRT/C Counseling Track (Option) -Interdisciplinary Studies-Business Psychology Major -Business Psychology Concentration Psychology Minor
UMPI	Bachelor of Arts	Psychology Major -Concentration in General Psychology -Concentration in Business Psychology -Concentration in Biopsychology Psychology Minor
UMA		Psychology Minor
UMM	Bachelor of Arts	Psychology and Community Studies Major -Concentration in Applied Psychology -Concentration in Disabilities in Youth
Campus	Master Degree Programs	Description
UM	Master of Arts	Psychology -Concentration in Developmental Psychology -Concentration in Psychological Sciences
USM	Master of Science	Major in Educational Psychology -Concentration in Applied Behavior Analyses -Concentration in School Psychology
Campus	Doctoral Degree Programs	Description
UM	Doctor of Philosophy	Psychology -Concentration in Clinical Psychology -Concentration in Developmental Psychology -Concentration in Psychological Sciences
USM	Doctor of Psychology	School Psychology
Campus	Certificate Programs	Description
UMM	Certificate	High School Psychology Teacher Preparation

## Appendix II PSY Courses and Transfer Equivalents by Campus

The full document is an Excel Spreadsheet with extensive annotation. Basic course list information from the full spreadsheet is included in this document, for UMA, for illustration.

<u>UMA PSY Course Details (and a few other related courses)</u>				<u>Established Equivalencies</u>					
Number	Course Title (Description Notated)	Typically Offered	Modality	UM	UMF	UMFK	UMM	USM	UMPI
PSY 100	Introduction to Psychology	Fall, Spring, Summer	Live, ITV, Online	PSY 100	PSY 101S	PSY 100	PSY 110	PSY 101	PSY 100
PSY 107E	Introduction to Global Citizenship	Spring	ITV	-	-	-	-	-	-
PSY 202E	Biological Basis of Behavior	Fall & Spring	Bangor, Online	-	-	-	-	-	-
PSY 205	Forms of Social Influence	Spring, Summer	Bangor, Online	CMJ 200X	PSY 299T	PSY 199	PSY 2xx	PSY 2xx	PSY 2xx
PSY 229	Models of Addiction	Fall, Spring, Summer	ITV, Online	PSY 200X	PSY 299T	PSY 199	PSY 2xx	GEL 2xx	PSY 341
PSY 302	Psychology of Childhood	Fall & Spring	Online	PSY 223	PSY 299T	PSY 300	PSY 212	PSY 323	PSY 3xx
PSY 304	Psychology of Adolescence	Spring, Summer	Online	PSY 224	PSY 299T	PSY 301	PSY 319	PSY 324	PSY 3xx
PSY 306	Behavior Modification	Fall & Summer	Online	PSY 300X	PSY 299T	PSY 306	PSY 3xx	PSY 340	PSY 3xx
PSY 307E	Applied Global Citizenship: Selected Topics	Spring	ITV	-	-	-	-	-	-
PSY 308	Human Development	Fall, Spring, Summer	Live, ITV, Online	PSY 300X	PSY 225S	PSY 308	PSY 201	HRD 200	PSY 205
PSY 309	Psychology of Adulthood	Fall & Spring (has not been offered since Spring)		PSY 300X	PSY 226	PSY 412	PSY 324	PSY 325	PSY 448
PSY 310	Psychology of Personality	Fall & Spring	Online	PSY 208	PSY 350	PSY 310	PSY 312	PSY 338	PSY 370
PSY 312	Psychology of Human Adjustment	Fall	ITV, Online	PSY 300X	PSY 299T	PSY 210	PSY 102	PSY 232	PSY 3xx
PSY 315	Transpersonal Psychology	Fall (has not been offered since Spring 2010)		PSY 300X	PSY 300	PSY 399	PSY 319	PSY 3xx	PSY 3xx
PSY 333E	Psychology of Disaster & Climate Change	Fall, Odd Years	Online	-	PSY 299T	PSY 399	-	-	-
PSY 342	Psychology of Genocide Survival	Not Regularly Offered (has not yet been offered)		PSY 300X	GEL 399T	PSY 399	-	-	-
PSY 345	Problems and Interventions in Childhood	Fall, Spring, Summer	ITV	PSY 300X	PSY 299T	PSY 399	PSY xxx	PSY 3xx	PSY 3xx
PSY 355	Social Psychology	Variable	ITV, Online	PSY 230	-	PSY 360	PSY 311	PSY 230	-
PSY 361	Applied Social Psychology	Not Regularly Offered (has not been offered)		PSY 300X	PSY 399T	PSY 399	-	PSY 3xx	-
PSY 362	Language and Literacy in Early Childhood	Variable	Online	ERL 300X	PSY 399T	PSY 399	-	GEL 3xx	EDU 354
PSY 364	Psychology of Men and Boys	Variable	Online	PSY 300X	GEL 399T	PSY 399	PSY 319	PSY 3xx	PSY 3xx
PSY 400	Abnormal Psychology	Fall, Spring, Summer	ITV	PSY 212	PSY 209	PSY 400	PSY 230	PSY 233	PSY 235
PSY 401	Educational Psychology	Variable	Online	EHD 203	PSY 499T	EDU 401	EDU 309	PSY 3xx	PSY 4xx
PSY 410	Forensic Psychology	Offered Annually (has not been offered yet)		-	-	-	-	-	-
PSY 415	Cross-Cultural Psychology	Not Regularly Offered	Online	PSY 400X	PSY 499T	PSY 399	PSY 419	PSY 3xx	PSY 4xx
SSC 220	Basic Research Methods	Offered Annually	Online	GEL 200	GEL 299T	SSC 199	-	-	-
SSC 320	Research Methods in Social Science	Fall & Summer	Live, Online	SOC 390	GEL 399T	SSC 399	SSC xxx	GEL 3xx	PSY 311

### Appendix III

**Table 1.** Transfer credit equivalency matrix for **Introductory/General Psychology** courses in the University of Maine System.

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 100]</b>	PSY 101	PSY 101S	PSY 100	PSY 110	PSY 100	PSY 100
USM	PSY 100 PSY 100X ----- PSY 100X	both <b>[PSY 101]</b> <b>[PSY 102]</b> ----- <b>[PSY 101]</b> only	PSY 101S PSY 199T ----- PSY 101S	PSY 100 PSY 100 ----- PSY 100	PSY 110 PSY XXX ----- PSY 100	PSY 100 PSY 1XX ----- PSY 100	PSY 100 PSY 199 ----- PSY 100
UMF	PSY 100	PSY 101	<b>[PSY 101S]</b>	PSY 100	PSY 110	PSY 100	PSY 100
UMPI	PSY 100	PSY 101	PSY 101S	<b>[PSY 100]</b>	PSY 110	PSY 100	PSY 100
UMM	PSY 100	PSY 101	PSY 101S	PSY 100	<b>[PSY 110]</b>	PSY 100	PSY 100
UMA	PSY 100 ----- PSY 100 PSY 100X	PSY 101 ----- PSY 101 PSY 102	PSY 101S ----- PSY 199ST PSY 199ST	PSY 100 ----- none none	PSY 110 ----- none none	<b>[PSY 100]</b> ----- <b>[PSY 101]</b> <b>[PSY 102]</b>	PSY 100 ----- PSY 100 PSY 199
UMFK	PSY 100	PSY 101	PSY 101S	PSY 100	PSY 110	PSY 100	<b>[PSY 100]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 100 General Psychology

USM: PSY 101 General Psychology I

PSY 102 General Psychology II

UMF: PSY 101S General Psychology

UMPI: PSY 100 General Psychology

UMM: PSY 110 Introduction to Psychology

UMA: PSY 100 Introduction to Psychology ; PSY 101 General Psychology I ;

PSY 102 General Psychology II

UMFK: PSY 100 Introduction to Psychology

### Appendix III

**Table 2.** Transfer credit equivalency matrix for **Social Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 230]</b>	PSY 230	PSY 208	PSY 200	PSY 311	PSY 355	PSY 360
USM	PSY 230	<b>[PSY 230]</b>	PSY 208	PSY 200	None	PSY 360	PSY 360
UMF	PSY 230	PSY 230	<b>[PSY 208]</b>	PSY 200	PSY 311	PSY 355	PSY 360
UMPI	PSY 230	PSY 230	PSY 208	<b>[PSY 200]</b>	PSY 311	PSY 360	PSY 360
UMM	PSY 230	PSY 230	PSY 208	PSY 200	<b>[PSY 311]</b>	PSY 360	PSY 360
UMA	PSY 230	PSY 230	PSY 208	PSY 200	PSY 311	<b>[PSY 360]</b>	PSY 360
UMFK	PSY 230	PSY 230	PSY 208	PSY 200	PSY 311	PSY 360	<b>[PSY 360]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 230 Social Psychology

USM: PSY 230 Social Psychology

UMF: PSY 208 Social Psychology

UMPI: PSY 200 Social Psychology

UMM: PSY 311 Social Psychology

UMA: PSY 355 Social Psychology

PSY 360 Social Psychology

UMFK: PSY 360 Social Psychology

**Appendix III**

**Table 3.** Transfer credit equivalency matrix for **Abnormal Psychology / Psychopathology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 212]</b>	PSY 233	PSY 209	PSY 235	PSY 230	PSY 400	PSY 400
USM	PSY 212	<b>[PSY 233]</b>	PSY 209	PSY 235	PSY 230	PSY 3XX	PSY 199 PSY 399
UMF	PSY 212	PSY 233	<b>[PSY 209]</b>	PSY 235	PSY 230	PSY 400	PSY 362
UMPI	PSY 212	PSY 233	PSY 209	<b>[PSY 235]</b>	PSY 230	PSY 400	PSY 400
UMM	PSY 212	PSY 233	PSY 209	PSY 235	<b>[PSY 230]</b>	PSY 400	PSY 400
UMA	PSY 212	PSY 233	PSY 209	PSY 235	PSY 230	<b>[PSY 400]</b> <b>[PSY 400H]</b>	PSY 400 PSY 362
UMFK	PSY 212 PSY 200X none	PSY 233 PSY 233 PSY 233	none PSY 209 PSY 209	PSY 235 PSY 235 PSY 235	PSY 230 PSY 230 none	PSY 400 PSY 400 PSY 400	<b>[PSY 342]</b> <b>[PSY 362]</b> <b>[PSY 400]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 212 Abnormal Psychology

USM: PSY 233 Psychopathology

UMF: PSY 209 Abnormal Psychology

UMPI: PSY 235 Abnormal Psychology

UMM: PSY 230 Abnormal Psychology

UMA: PSY 400 Abnormal Psychology

PSY 400H Abnormal Psychology

UMFK: PSY 342 Abnormal Psychology

PSY 362 Abnormal Psychology

PSY 400 Abnormal Psychology

### Appendix III

**Table 4.** Transfer credit equivalency matrix for **Statistics in Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 241]</b>	PSY 105	PSY 275	PSY 311	MAT 113	PSY 2XX	PSY 199
USM	PSY 241 PSY 241	<b>[PSY 105]</b> <b>[PSY201]</b>	PSY 275 none	SOC 311 none	MAT 113 none	PSY 2XX none	MAT 199/ MAT 198
UMF	PSY 200X	PSY 105	<b>[PSY 275]</b>	SOC 311	None	PSY 2XX	SSC 340
UMPI	STS 215	MAT 120	PSY 299T	<b>[MAT 101]</b>	MAT 113	MAT 1XX	MAT 198
UMM	STS 232	MAT 120	MAT 120M	MAT 101	<b>[MAT 113]</b>	MAT 115	MAT 198
UMA	PSY 241	PSY 105	None	PSY 311	None	<b>[PSY 211]</b>	PSY 199
UMFK	STS 232	MAT 120	MAT 120M	MAT 201	MAT 113	MAT 115	<b>[MAT 351]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 241 Statistics in Psychology

USM: PSY 105 Statistics in Psychology

PSY 201 Statistics in Psychology

UMF: PSY 275 Statistical Applications to Psychology

UMPI: MAT 101 Basic Statistics

UMM: MAT 113 Introduction to Statistics

UMA: PSY 211 Statistical Methods

UMFK: MAT 351 Statistics I

### Appendix III

**Table 5.** Transfer credit equivalency matrix for **Research Methods in Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 245]</b>	PSY 205	PSY 299T	PSY 312	PSY XXX	PSY 2XX	PSY 199
USM	PSY 245 PSY 200X	<b>[PSY 205]</b> <b>[PSY 206]</b>	PSY 299T PSY 299T	PSY 2XX PSY 2XX	Both = SSC 420	PSY 2XX PSY 2XX	PSY 199 PSY 199
UMF	PSY 245	PSY 4XX	<b>[PSY 400]</b>	SOC 311	SSC420	SSC 320	SSC 440
UMPI	PSY 300X PSY 245	PSY 3XX PSY 205	PSY 275 PSY 400	<b>[PSY 311]</b> <b>[PSY 312]</b>	Both = SSC420	SSC 320 SSC 3XX	SSC 340 SSC 440
UMM	None	None	PSY 299ST	None	<b>[PSY 323]</b>	PSY 3XX	PSY 399
UMA	SOC 390 SOC 390	GEL 3XX GEL 3XX	GEL 399 none	PSY 311 SOC 3XX	SSC 3XX SSC 3XX	<b>[SSC 320]</b> <b>[SSC 320H]</b>	SSC 399 SSC 399
UMFK	PSY 300X	PSY 205	PSY 400	SOC 311	SSC 3XX	SSC 320	<b>[PSY 340]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 245 Principles of Psychological Research

USM: PSY 205 Experimental Methodology

PSY 206 Methods Laboratory

UMF: PSY 400 Research Methods

UMPI: PSY 311 Research Methods I

PSY 312 Research Methods II

UMM: PSY 323 Research Methods and Design

UMA: SSC 320 Research Methods in Social Science

SSC 320H Research Methods in Social Science

UMFK: PSY 340 Research Methods



### Appendix III

**Table 6.** Transfer credit equivalency matrix for **Biological Psychology / Physiological Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 365]</b>	PSY 365	PSY 399T	PSY 466	None	PSY 3XX	PSY 199 PSY 399
USM	PSY 365	<b>[PSY 365]</b>	PSY 399T	PSY 448	PSY 442	PSY 3XX	PSY 199 PSY 399
UMF	PSY 365	PSY 365	<b>[PSY 315]</b>	PSY 3XX	None	PSY 3XX	PSY 399
UMPI	PSY 400X	PSY 3XX PSY 365	PSY 299T	<b>[PSY 446]</b> <b>[PSY 346]</b>	PSY 442	PSY 4XX	PSY 399
UMM	PSY 365	PSY 365	PSY 315	PSY 446	<b>[PSY 442]</b>	PSY 3XX	PSY 399
UMA	PSY200X	None	None	PSY446	None	<b>[PSY 202E]</b>	None
UMFK	None	None	None	None	None	None	<b>None</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 365 Biopsychology and Behavioral Neuroscience

USM: PSY 365 Physiological Psychology

UMF: PSY 315 Physiological Psychology

UMPI: PSY 446 Psychobiology

PSY 346

UMM: PSY 442

UMA: PSY 202E Biological Bases of Behavior

UMFK: No course

### Appendix III

**Table 7.** Transfer credit equivalency matrix for **Cognitive Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[PSY 350]</b>	PSY 360	PSY 399T	PSY 448	None	PSY 3XX	PSY 438
USM	PSY 350	<b>[PSY 360]</b>	PSY 399T	PSY 448	PSY 3XX	PSY 3XX	PSY 199 PSY 399
UMF	PSY 350	PSY 360	<b>[PSY 314]</b>	PSY 448	PSY 3XX	PSY 3XX	PSY 399
UMPI	PSY 400X	PSY 3XX	PSY 314	<b>[PSY 448]</b>	PSY 430	PSY 4XX	PSY 399
UMM	PSY 350	PSY 360	PSY 299ST	PSY 448	<b>[PSY 430]</b>	PSY 3XX	PSY 399
UMA	None	None	None	None	None	<b>None</b>	None
UMFK	PSY 350	PSY 360	PSY 399T	None	None	PSY 4XX	<b>[PSY 438]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: PSY 350 Cognition

USM: PSY 360 Cognitive Processes UMF:

PSY 314 Cognitive Psychology UMPI:

PSY 448 Cognitive Psychology UMM:

PSY 430 Perception and Cognition UMA:

No course

UMFK: PSY 438 Cognition

### Appendix III

**Table 8.** Transfer credit equivalency matrix for **Life Span Developmental Psychology** courses in the University of Maine System

Transfer Course From:	Transfer Course to:						
	UM	USM	UMF	UMPI	UMM	UMA	UMFK
UM	<b>[none]</b>	none	none	none	None	none	none
USM	PSY 200X	<b>[PSY 220]</b>	PSY 299T	PSY 205	none	PSY 308	PSY 199
UMF	none	none	<b>[none]</b>	none	None	none	None
UMPI	CHF 200X	HRD 200 PSY 220	PSY 225S	<b>[PSY 205]</b>	PSY 201	PSY 308	PSY 308
UMM	PSY 200X PSY 300X	PSY 2XX PSY3XX ----- --Both PSY 2XX PSY 220	PSY 299T PSY 299ST	PSY 205 PSY 3XX	<b>[PSY 212]</b> <b>[PSY 324]</b>	PSY 2XX PSY3XX ----- --Both PSY 2XX PSY 220	PSY 199 PSY 399
UMA	PSY 300X	HRD 200	PSY 225S	PSY 205	PSY 201	<b>[PSY 308]</b>	PSY 308
UMFK	CHF 201	HRD 200	PSY 399T	PSY 205	PSY 201	PSY 308	<b>[PSY 308]</b>

Note: Courses(s) offered by given institution in brackets and bolded on diagonal.

UM: none

USM: PSY 220 Psychology of the Lifespan

UMF: none

UMPI: PSY 205 Lifespan Development

UMM: PSY 212 Lifespan I

PSY 324 Lifespan II

UMA: PSY 308 Human Development

UMFK: PSY 308 Lifespan Human Development

**Appendix IV**  
**Subset of Psychology Related Employer Job Postings Requiring Bachelor's Degree or Higher in Maine**

<b>Occupations</b>	<b>Maine,2014</b>
Human Resources Specialists	858
Sales Managers	638
Management Analysts	498
Occupational Therapists	271
Public Relations and Fundraising Managers	220
Human Resources Managers	172
Postsecondary Teachers, All Other	309
Public Relations Specialists	137
Administrative Services Managers	216
Training and Development Specialists	202
Mental Health Counselors	234
Preschool Teachers, Except Special Education	115
Demonstrators and Product Promoters	122
Loan Officers	153
Compensation, Benefits, and Job Analysis Specialists	197
Real Estate Sales Agents	40
Social Workers, All Other	167
Recreation Workers	235
Meeting, Convention, and Event Planners	95
Sales Representatives, Services, All Other	89
Compliance Officers	81
Patient Representatives	472
Health Educators	187
Social and Human Service Assistants	136
Healthcare Social Workers	133
Psychiatrists	106
Clinical Research Coordinators	61
Advertising Sales Agents	34
Compliance Managers	56
Social and Community Service Managers	79
Chief Executives	87
Sales and Related Workers, All Other	44
First-Line Supervisors of Personal Service Workers	36
Mental Health and Substance Abuse Social Workers	135
Child, Family, and School Social Workers	55
Training and Development Managers	35
Compensation and Benefits Managers	45
Marriage and Family Therapists	79
Substance Abuse and Behavioral Disorder Counselors	81
Community and Social Service Specialists, All Other	44
Fitness and Wellness Coordinators	77
Sum	7,031

## Appendix V

The Online Learning Consortium recently published a list of updated e-learning definitions<sup>1</sup>. The University of Maine has used the Online Learning Consortium materials to develop the following recommended definitions for E-Learning.

### E-Learning Definitions

#### COURSE-LEVEL DEFINITIONS

##### *Mode of Instruction*

1. **In-Person Course** (mode is coded as On Site Classroom) - Course activity is organized around scheduled class meetings and is delivered in a classroom or other in-person environment.
2. **Video Conference Course** (mode is coded as On Site Classroom if the course is originating from UMaine; mode is coded as VC for all receive sites) - Course activity is organized around scheduled class meetings, but class sessions are delivered via VC. Students are required to go to a particular physical location to access the course.
3. **Blended Course** (mode is coded as Blended[Online & On Site]) - Online activity is mixed with classroom meetings, replacing at least 20 percent, but not all required in-person meetings (online activity replaces 20-99% of class meetings).
  - a. MS must detail when students are expected to be live in the classroom.
4. **Online Course** (mode is coded as Online) - All course activity is done online; there are no required in-person meetings within the course and no requirements for on-campus activity.
  - a. Courses that use synchronous web conferencing technology such as Google Hangouts or Adobe Connect may still be considered “online” courses as long as there is no requirement for students to be physically present at a particular location.

##### *Time Options*

1. **Asynchronous** - Students and faculty do not interact with one another simultaneously in time. Asynchronous courses are generally at least partially self-paced and can be entirely self-paced.
2. **Synchronous** - Students and faculty interact with one another simultaneously in time. Synchronous courses have set times when the students and instructors come together in either an online or in-person meeting.
  - a. All synchronous meetings for both on campus and online courses should be listed in MaineStreet as soon as possible (ideally before student registration begins). For

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<sup>1</sup> <http://onlinelearningconsortium.org/updated-e-learning-definitions-2/>

in person courses, synchronous meetings are listed under Days & Times. For online courses, synchronous meetings are most generally listed under Class Notes.

3. **Hybrid** - A mix of asynchronous and synchronous interactions.

### **PROGRAM-LEVEL DEFINITIONS**

1. **Traditional Classroom Program** - The program may include a mix of in-person, blended, or online courses. However, the majority of courses in the program are offered in-person, and the primary audience for these programs are on-site students.
2. **Blended Program** - A significant percentage, but not all of the credits required for program completion are offered online. Typically, up to 50 percent of the curriculum may be offered as in- person or blended. Blended programs are created with a specific access goal and target audience in mind. An example of a blended program would include those with a low-residency requirement.
3. **Online Program** - All credits required to complete the program are offered as online courses. Students can complete the program completely at a distance, with no required in-person meetings. Online synchronous meetings are acceptable, but not in-person synchronous meetings.