

UNIVERSITY OF CENTRAL FLORIDA

College of Sciences High-Impact Practices

UCF High-Impact Educational Practices (HIP) Signature Experience Initiative Report

By the 2019-2020 catalog year, all College of Sciences programs will include either one required course or a selection of courses as part of the degree requirements to ensure 100% student participation in a High-Impact Practice or Signature Experience prior to graduation. Programs have been encouraged to pursue any needed course designations and curriculum changes during fall 2018 to meet this goal.

Report template is used courtesy of Performance Solutions, UCF Psychology Department



College of Sciences

JULY 2018

Revised 8/7/18 based on additional review.

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PROJECT INFORMATION

In the 2017-2018 academic year, the college was awarded a Quality Enhancement Program (QEP) Seed Fund grant to help the college meet the challenges of the UCF Collective Impact Strategic Plan. Specifically, this award was intended to assist the college in meeting the university's goal that by 2020 every UCF undergraduate will graduate with a high-impact signature experience in the major.

Title of Project: College of Sciences High-Impact Practices

Duration of Project: August 2017 to July 2018

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To ensure the university goal is met, <u>Appendix A</u> identifies the courses that can or already meet the high-impact signature experience requirements, and any curricular actions that need to take place during the fall 2018. These courses and actions were identified by and in consultation with program contacts.

PROJECT OBJECTIVES

In accordance with the UCF Strategic Planning Goal that 100% of undergraduates participate in a positive, high-impact student experience, our project will ensure that signature and high-impact practice experiences ("s/HIPs") exist in all programs offered through the College of Sciences. As a result of this project and by catalog year 2019-2020, all COS programs are expected to have at least one required course or a selection (a menu) of courses from which a student must choose to ensure 100% student participation in a s/HIP prior to graduation. Programs have been encouraged to pursue any needed course designations and curriculum/catalog changes during fall 2018 to meet this goal.

Objective One

The first goal of this project was to examine our academic programs and confirm existing signature, high-impact as well as general high-impact practices, assessing what is already meeting the UCF goal and what work is needed. In addition, this project intends to ensure those experiences are accessible to and can be completed by all students. Based on meetings and other communications with program directors and department/school representatives, we were able to document multiple qualified offerings already in place in a majority of COS programs.

Objective Two

Next, we are ensuring that appropriate business processes are in place to track offerings of and enrollments into s/HIPs, through appropriate course designation or classification. We coordinated with relevant support offices and shared information and resources with COS program representatives. To improve tracking of s/HIPs, our particular focus was

"Success can only happen when we expand opportunity and demand excellence."

- University of Central Florida

operationalizing and sharing the requirements of qualifying courses. This resulted in our confirming the following qualifying course designations: Service-Learning (SL), Research Intensive (RI), and Integrative Experience (IE); and identifying the following existing course numbers and catalog indicators: Capstone, Study Abroad, Directed Independent Research, and Internship. As confirmed by Dr. Kimberly Schneider, Assistant Dean and Director of the Office of Undergraduate Research and lead of the Signature Experience Initiative, all of these are qualifying courses that will meet the UCF

goal. Knowing these, the university and college will be easily able to track student enrollments into s/HIPs.

Where s/HIPs were not already integrated as requirements into the curriculum, we consulted, provided options, and recommended appropriate and program-specific s/HIPs. With the help of program personnel, we identified courses that have implemented certain components that are characteristic of high-impact practices, but have not yet reached the status of being designated a high-impact course (e.g., research courses, service-learning and community-oriented courses, professional practice courses). For tracking purposes, we shared recommendations with program personnel for those courses to obtain qualifying designations.

Objective Three

Finally, we are addressing and ensuring that appropriate curricular or program assessments are in place that are relevant to s/HIPs. In considering this goal, we recognized university offices that develop and manage course designations or have formulated the designated list of qualifying courses that fulfill this goal. Those university offices include the Office of Quality Enhancement Plan (QEP), Experiential Learning, and the Office of Undergraduate Research. The designations and courses that are qualifying courses for the Signature Experience Initiative are identified in Objective Two.

At present, the designation criteria assess and ensure that designated courses meet the requirements of the designation and thereby fulfill the criteria of signature and high-impact practices as determined by the university. Because the well-planned designation processes consider the characteristics and quality of reviewed courses, we are suggesting that the designation process be combined with a periodic review of these courses.

OVERVIEW OF HIGH-IMPACT PRACTICES

High-impact educational practices (HIPs) are learning experiences that enhance a student's academics (UCF Division of Teaching and Learning (DTL) website). Participating in HIPs strengthens a student's ability to develop intellectually and gain practical skills in communication, collaboration, and critical thinking (Kuh, 2008). Furthermore, research has shown that HIPs positively influence student retention, academic performance, and faculty and peer interaction (Brownell & Swaner, 2009).

"High-impact practices increase rates of student retention and student engagement."

Association of American
 Colleges & Universities

UCF DTL identified six key characteristics of HIPs. A course is considered high-impact if students:

- 1) Devote considerable time and effort to purposeful tasks that deepen their commitment to their activity and academic program.
- 2) Interact with faculty about substantive matters over an extended period.
- 3) Experience diversity and inclusion through contact with people who are different from themselves.
- 4) Receive frequent constructive feedback about their performance.
- 5) Connect what they are learning in different settings on-and-off campus.
- 6) Receive the tools and ethical grounding to act with confidence for the betterment of the human condition.

"High-impact practices facilitate learning outside of the classroom."

- University of Central Florida

In line with Kuh's (2008) AAC&U report, UCF offers a range of high-impact educational practices, namely:

- First Year Courses/ Seminars
- Learning Communities
- Undergraduate Research
- Experiential Learning
- Study Abroad & Global Learning
- Capstone Courses
- Integrative Experience Courses

HIPs that are upper division courses (3000 or 4000

levels) and taken for credit are considered Signature Experiences.

Figure 1 – High-Impact Educational Practices Flyer

What Are Small groups of students and faculty meet on a regular basis to foster a First **High-Impact** classroom-community that emphasize critical inquiry, writing, information Year literacy, and collaborative learning to elicit students' academic and social **Educational Practices** Courses/ development. Seminars High-Impact Educational Practices Integrate learning across courses to provide students Learning with critical thinking experiences and opportunities for (HIPs) are learning experiences that engagement beyond the traditional classroom. Communities strengthen a student's academic experience. Participating in HIPs Research Intensive Courses - Curriculumstrengthens a student's ability to based classes that actively engage students develop intellectually and gain in a guided line of inquiry that adhere to some practical skills such as communication, aspect of the research process and include a research deliverable. collaboration, and critical thinking. Undergraduate (Kuh, 2008). Directed Independent Research- With guidance Research from a faculty mentor, undergraduate students explore an inquiry or investigation that makes or Students engaging in HIPs should: supports the creation of an original intellectual or creative contribution to the discipline. 1) Devote considerable time and effort to purposeful tasks that deepen their Service-Learning - Course-based activity commitment to their activity and that furthers the learning objectives of the academic program. class, addresses community needs, and requires students to reflect on their activity 2) Interact with faculty about substantive in order to gain an appreciation for the matters over an extended period of time. Experiential relationship between civics and academics. 3) Experience diversity through contact Learning with people who are different from Internship, Co-Ops, Clinical, Practicumthemselves Occur in a professional setting—usually 4) Receive frequent feedback about their related to their career interests-that allows students to gain real-world experience performance. and benefit from supervision and coaching 5) Connect what they are learning in from professionals in the field. different settings on-and-off campus. 6) Receive the tools and ethical grounding to act with confidence for the Study betterment of the human condition. Experiences that encourage global and Abroad civic engagement, as well as an increased & Global appreciation for culture and diversity. UCF Signature Experience Initiative Learning Students have the opportunity to broaden their perspectives by studying in diverse, local Based on shared student-learning communities or at international institutions. outcomes, specific upper division HIP experiences will be designated as signature experiences for each major. They will be integrated into each degree program as a culminating academic experience. A culminating experience that enables students. Capstone who have nearly completed their degree program, Beginning in the 2020-2021 catalog year, Courses to integrate and apply learnings from their degree participating in a signature experience programs into projects. HIP will be a graduation requirement in all degree programs. Kuh, G. D. (2008). High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter. Association of American Colleges and Universities. Integrative Offers students an opportunity to explore integrative pathways that Experiences connect the core knowledge and skills of their major to real-world https://dtl.ucf.edu/hip/ professional and civic contexts through cooperative learning. Division of Teaching and Learning

https://dtl.ucf.edu/wp-content/uploads/2017/11/UCF-HIP-Overview Division-of-TL.pdf

First Year Courses/Seminars and Learning Communities

First Year Courses/Seminars and Learning Communities focus on lower division coursework or tend to occur outside the typical course framework. The Signature Experience initiative is focused on upper division HIPs within the COS majors. Thus, this report is limited to an expansion and description of coursework within the remaining categories.

Undergraduate Research

Undergraduate research separates into research-intensive courses and directed independent research.

Research Intensive

Research-intensive courses engage students in academic inquiry that is guided by a content expert. Students learn about ethics, the research process, applying critical thinking skills, and formal academic communication. They produce a research product such as a paper, presentation, poster, or digital communication. An aim of research-intensive courses is to build knowledge and excitement in research endeavors and to help students identify research niches and potential mentors for further research engagement. The precise definition of the term "research intensive" as it applies to UCF courses is currently in development by the Office of Undergraduate Research and the Division of Teaching and Learning.

Directed Independent Research

Independent student investigation within the discipline of a supervising faculty member is the focus of Directed Independent Research. The process usually requires and promotes development of student skills in reading, inquiry and analysis, and creative thinking. While faculty members mentor students throughout the process, students develop an individualized research question and conduct the research autonomously, thereby enhancing students' problem

"Students learn how to problem solve autonomously."

- University of Central Florida

solving skills and the ability to work independently. This research process should result in a creative or intellectual contribution by the student to the field of study.

Experiential Learning

Experiential learning features service-learning courses, as well as internships, practicums, and clinicals. In addition, certain UCF programs provide students with the opportunity to participate in high-impact practices specific to their degree program.

"Experiential learning provides an opportunity for students to apply what they are learning."

 Association of American Colleges & Universities

Service-Learning

Service-Learning courses help students to consolidate learning and apply course concepts to the community. Through community and organizational partnerships, students gain a greater understanding of the needs of university, local, regional or global entities and how academic

"The community receives an infusion of people power and access to university resources."

- University of Central Florida

knowledge can be used to meet those needs.

Faculty members guide students as they complete service-learning courses by addressing academic and social concerns. Students connect with community partners, providing their knowledge and service to strengthen the community. Reflection on this connection between coursework and community is intended to lead to learning gains in ethical reasoning, intercultural knowledge, and to stimulate civic engagement.

Internship, Co-Op, Clinical Practicum

Internships, co-ops, and clinical practicums encourage the application of student learning to professional practice through supervised work, curricular support, and evaluation. Curricular support may be in the form of a seminar, web course, or advising and helps the student maximize the benefit of experiential learning opportunities. These experiences may vary from full-time to part-time activities, be paid or unpaid, and sometimes are part of professional licensing and accreditation requirements. There are clear links to employment practices and job skills, thus the student gains strong understanding of workplace practices and professional application of knowledge. Finally, the evaluation component provides the student with a first impression of on-the-job performance feedback and appraisals.

Study Abroad & Global Learning

Study Abroad and Global Learning programs provide students with high-impact international and cultural experiences.

Students may fully immerse themselves in a host culture while obtaining global views of their chosen discipline. Insights from such global learning encourage global citizenship and lead to a more expansive understanding of the student's professional field. Offerings at UCF include faculty-led programs, student exchanges, and international internship partnerships, which vary in length (i.e., short-

"Students explore cultures, life experiences, and worldviews different from their own."

> Association of American Colleges & Universities

term, semester-long, or year-long) to fit students' academic and budget needs. These experiences enhance information literacy, problem solving, and motivate lifelong learning.

Capstone Course

Students take capstone courses near graduation as a way to apply their learning to a project. Examples of projects include research papers, performances, portfolios of work, or exhibits. Projects may be customized to students or student groups and requirements will be influenced by and reflective of departmental and discipline-related expectations. The goal is for students to develop

"Capstone courses
develop leadership,
teamwork, decisiveness,
goal-setting, problemsolving, and critical
thinking."

- University of Central Florida

projects that are reflective of their interdisciplinary learning and have practical applications for their field of study. A critical component is that knowledgeable faculty guide the project. Key student learning objectives include Creative Thinking, Inquiry and Analysis, and Problem Solving.

Integrative Experience

Integrative Experience courses require students to develop learning plans that connect their academic knowledge, experiences, and skills to their self-development and professional goals. Students learn to adapt and apply disciplinespecific skills, theories, or methods to complex and difficult real world issues. They collaborate actively with faculty and other students to diversify their experiences, perspectives, and communication within and beyond the university. Reflecting on and connecting knowledge and experience to professional and personal goals are core components of these courses.

"Students work closely with their professors and peers to develop, articulate, and reflect on their goals."

- University of Central Florida

DESIGNATION OF s/HIP COURSES

The Division of Teaching and Learning identified the courses in Table 1 as those meeting the Signature Experience Initiative. Please recall that Signature Experience courses are upper division (3000 or 4000 level), HIP courses. For more information, see: https://dtl.ucf.edu/high-impact-practices/signature-experience/

Table 1 – s/HIP Options for Degree Programs

	UCF High-Impact Educational Practices (HIPs) - Signature Experience Initiative (SEI): Options for Degree Programs					
SEI Options		onal Fractices (HIFS) - Signature Experience mittati	ve (3EI). Options it	begree Programs		
(degree programs may have one shared requirement or students may choose from a list)		Short Description of SEI Options (may vary between degree programs)	Course Numbers (3000 or 4000)	Notes		
Capstone Co	ourses	Culminating experience that challenges students near the end of their degrees to create projects that integrate and apply what they have learned throughout their programs.	Various options specific to the degree program			
Directed Independent Research		An inquiry conducted by an undergraduate, under the guidance of faculty, that makes, or supports the making of, an original contribution to the discipline	General: 4912 Honors Thesis (HIM): 4903H, 4970H	An honors thesis is designed for students who qualify for the HIM program.		
Study Abroad	d	Enhances the global classroom at UCF and complements the traditional on-campus student experience with a high-impact international experience.	3955, 4955 (or other courses approved by UCF Abroad)			
Experiential Learning	Internship/ Co-op	Provides learners an opportunity to build upon and apply knowledge and skills in a supervised workplace context	3949, 4949, 3940, 4941, COE X947			
	Clinical	Allows students to be immersed in the field with opportunities to develop and demonstrate competencies for the profession.	Varies			
Practicum		Focuses on field experiences that allow students to observe and document how working professionals perform their job responsibilities	Varies			
HIP Integrative Designated Experience Courses (IE)		Students explore integrative pathways that connect the core knowledge and skills of their major to real-world professional and civic contexts.	Varies Designation is	Designation process will open for RI and IE in fall 2018, with		
	Research Intensive (RI)	Involves faculty experts in curriculum-based engagement in aspects of the research or creative inquiry process	necessary at the course-level for SEI requirement	first courses bearing approved designation		
	Service- Learning (SL)	Furthers the learning objectives of the academic course, addresses community needs, and requires students to reflect on their activity.		available for spring 2019 (SL is already available)		

What does not work for SEI requirements?

- Directed independent study*
- Lower level courses**
- 0 credit hour option courses (all SEI must be at least 1 credit hour)

Draft V 2.3 June 28, 2018

^{*}Directed independent study provides an opportunity for the student to complete academic work not currently offered as a course at UCF, under the direct guidance of a faculty member. Although valuable, an independent study is typically not a HIP.

^{**}Lower division High-Impact Educational Practices (HIPs) occur throughout the student experience but are not a component of this specific SEI requirement

RESOURCES

General Resources

For more information about the courses that fulfill the high-impact practice and signature, high-impact experience goals, the Division of Teaching and Learning offers additional information and resources.

AAC&U: https://www.aacu.org/leap/hips

High-Impact Practices: https://dtl.ucf.edu/high-impact-practices/ https://dtl.ucf.edu/high-impact-practices/

Signature Experience: https://dtl.ucf.edu/high-impact-practices/signature-experience/

Course Designation: https://dtl.ucf.edu/high-impact-practices/course-designations/

Presentations:

Appendix B: Academic Student Engagement: Growing HIPs Campus-wide

Presented by Dr. Kimberly Schneider, Assistant Dean College of Undergraduate Studies, at COS chairs/director meeting 8/30/17. Dr. Dorman and Dr. Pace provided supplemental and college-specific information.

Appendix C: High-Impact Practices and Pegasus Path presentation

Dr. Pace and Lee Anne Kirkpatrick, director of COS Advising Services, coordinated a presentation of High-Impact Practices and the Pegasus Path project for the college. Note: components of the presentation that dealt specifically with the Pegasus Path project have been removed for brevity and focus.

To pursue specific course designations, please contact the office or websites listed below (note: offices and websites are subject to change):

Research Intensive:

Designation occurs through application and committee approval. The application form should be available fall 2018.

Office of Undergraduate Research: OUR@ucf.edu

https://our.ucf.edu/faculty/research-intensive-courses/

https://dtl.ucf.edu/ > Faculty > Course Designations > Research Intensive

Directed Independent Research:

Designation occurs through course enrollment in approved special course registration.

Service-Learning:

Designation occurs through application and Service-Learning approval. The application form is found here: https://explearning.ucf.edu/faculty/course-approval-form/.

Appendix D: Details of courses that already have the Service-Learning designation

<u>https://dtl.ucf.edu/</u> > Faculty > Course Designations > Service-Learning

https://explearning.ucf.edu/ > Faculty/Staff > Support for Faculty and Colleges

https://explearning.ucf.edu/faculty/service-learning-course-criteria/

Internships, Co-Ops, Clinical Practicum:

Designation occurs through course enrollment in approved special course registration or through the Undergraduate Curriculum Committee course approval processes.

https://explearning.ucf.edu/ > Faculty/Staff > Support for Faculty and Colleges

Study Abroad & Global Learning:

Designation occurs through approved short-term study abroad courses approval and course enrollment in approved special course registration

https://studyabroad.ucf.edu/ > Faculty and Staff > Short Term Program Proposal

Capstone:

Designation occurs as identified in the undergraduate catalog ("Capstone Requirement") and approved through the Undergraduate Curriculum Committee course approval processes.

Integrative Experience:

Designation occurs through application and committee approval. The application form should be available fall 2018.

Office of the Quality Enhancement Plan: QEP@ucf.edu

https://dtl.ucf.edu/ > Faculty > Course Designations > Integrative-Learning Experience

For questions concerning the application process or Integrative-Learning designation, please check information in the next section or contact the Office of the Quality Enhancement plan at QEP@ucf.edu.

PARTICIPANTS

After initially engaging all department chairs and the school's director, each department/school identified preferred program contacts for the signature, high-impact practices initiative. Dr. Pace ensured that key faculty members from each of the college's departments and the School remained involved throughout the process. Participants in this project include:

Anthropology	
Stacy Barber*	Undergraduate Coordinator, Anthropology B.A.
Biology	, , , , , , , , , , , , , , , , , , , ,
Eric Hoffman*	Undergraduate Coordinator, Biology B.S.
Laurie von Kalm*	Associate Chair
Chemistry	
Tamra Legron-	Undergraduate Coordinator, Forensic Science B.S.
Rodriguez*	
Seth Elsheimer*	Associate Chair
Pedro Patino*	Undergraduate Coordinator, Chemistry B.S.
Communication, Nicholso	n School
Joan McCain*	Coordinator, Advertising/Public Relations B.A.
Stephanie Rice*	Coordinator, Radio/Television B.A.
Jennifer Sandoval*	Coordinator, Communication & Conflict B.A.
Steve Collins	Coordinator, Journalism B.A.
Deanna Sellnow	Coordinator, Human Communication B.A.
Mathematics	
Joseph Brennan*	Associate Chair
Physics	
Enrique del Barco*	Associate Chair, Undergraduate Programs
Elena Flitsiyan*	Undergraduate Coordinator, Physics B.A./B.S.
Political Science	
Barry Edwards*	Undergraduate Coordinator, Political Science B.A. & Int'l & Global Studies B.A.
Nick Schenk	Academic Advising Coordinator
Psychology	
Karen Mottarella*	Associate Lecturer
Alisha Janowsky*	Assistant Chair, Director of Undergraduate Programs
Sociology	
Amy Donley*	Undergraduate Coordinator, Sociology B.A.
Liz Grauerholz*	Undergraduate Coordinator, Social Sciences B.S.
Statistics	
Nizam Uddin*	Undergraduate Coordinator, Statistics B.S.
COSAS	
Ryan Sexton*	Assistant Director
Dena Ford*	Coordinator of Academic Advising
Nicole Simms*	Coordinator of Academic Advising
Jillian Thompson	Coordinator of Academic Advising

^{*}Attended one of three introductory High-Impact Practices/Pegasus Path Presentations (Appendix C)

Dr. Pace met with the program directors and other representatives to confirm existing s/HIP experiences and where not available or offered, worked with programs to consider courses and elements of courses that held this potential. In these meetings, we also covered options for pursuing course designations and grouping, or

developing a menu of courses that would offer students appropriate HIP options.

Affirming participation, Dr. Pace worked with each program to develop individual plans that included pursuing qualifying course designation and/or submitting curriculum revisions. Dr. Dorman and Ms. Maria Williams will assist with any curricular updates. Details for your department are included in Appendix A: Program Specific Plans.

"Including at least one of these types of [s/HIP] courses in your program requirements will help us to meet the university goal of ensuring 100% of our undergraduates receive such an experience."

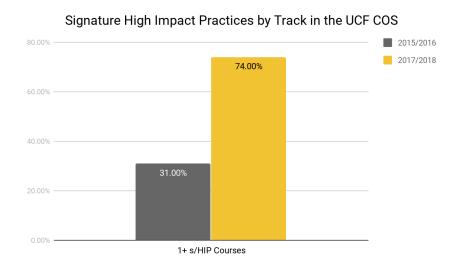
- V. Pace

ASSESSMENT

Measuring Success

At the beginning of the year, an initial review of COS' programs (including the various tracks and specializations) found that 31% included "signature" high-impact practices (s/HIPs). Applied to 2015-2016 graduates, this meant that 1436 (53%) of graduates could be identified as having experienced a s/HIP before making any changes.

Figure 2 - s/HIPs by UCF COS Track



After completing the initial, project-led evaluation of courses, and considering those programs that are now identified as including at least one qualifying course meeting s/HIP, we determined a more appropriate count of programs and found that 74% of them included at least one required s/HIP course (Figure 2). In order to meet official documentation and to facilitate tracking of s/HIP participation in the future, some of these

courses will need an official designation as capstone, integrative experience, or research intensive; or curriculum adjusted to revise a menu of course options to remove a single non-qualifying course from a required list of options. All of these programs expressed a willingness to pursue these designations or make needed curricular adjustments.

As a result of this project, the remaining 26% of programs now have a plan in place to develop a required s/HIP course or menu for their majors. To this end, by the conclusion of the 2018-2019 academic year, 100% of COS programs will have a required s/HIP in place or planned for the very near future. This will be accomplished with course designation approval and/or program changes expected during fall 2018.

Scale x Excellence = Impact

OUTCOMES

General Outcomes

When the underlying characteristics of HIP courses were explained and many program faculty and staff recognized similar components in their existing courses, it was not difficult to discuss how these and other courses might be identified and designated as Service-Learning, Research Intensive, Integrative Experience, Capstone, and so forth. These qualifying designations will enable recording of HIP offerings and tracking of student participation at both the college and university levels. Our team members were able to provide answers to HIP-related questions from program representatives and faculty by clarifying goals and definitions with personnel from offices of QEP, Experiential Learning, and other entities. We also shared elements from the UCF strategic plan that support university and college efforts to incorporate high-impact practices. The result is that programs generally see that they were already offering courses with many desirable HIP elements and will now benefit by intentional fine-tuning and formalizing the designation of those.

Discoveries

With our coordinated review, we discovered that more COS programs than expected already moved in the direction of implementing s/HIPs. At least two programs pursued catalog changes to reflect relevant program requirements and several new courses were designated as service-learning this past year.

Additionally, several programs increased their emphasis on active learning and linking these experiences with career-related learning, practice, potential employers and other community partners. These programs were especially interested in learning more about the in-development course designations of Research Intensive and Integrative Learning. We were able to relay specific questions about those designations and other qualifying s/HIPs to university QEP representatives (especially Dr. Schneider) and to communicate back their responses, updates, websites to watch, and additional information. Several COS programs mentioned strong interest in ongoing support from the university (training and monetary) to enable and encourage instructors to seek the course designations.

Impact Statement

We expect a large impact on majors in COS since early documentation (the basis of the grant application) indicated that 53% of 2015-2016 graduates could be identified as having enrolled in a s/HIP course. With program plans in place, the college is now on track to implement program-specific

requirements that would ensure by the 2019/2020 catalog year, 100% of graduates have the opportunity to enroll into a signature, High-Impact Practice course. All the departments and the School developed a general plan and most have clearly conceptualized and defined plans to achieve this goal.

"Innovation comes from the meeting of diverse viewpoints."

- University of Central Florida

The expansion of this goal to all programs provides every COS student with opportunities for active learning experiences, global and community contacts and experiences, and applied science and career insights. As noted previously, signature and high-impact practices provide a known benefit to students by reinforcing the relevance of their degree and providing and improving skills in critical thinking, effective communication and cognitive reflection (AACU, 2009; Kuh, 2008). Further, research shows that HIPs positively influence student retention, academic performance, and faculty and peer interaction (Brownell & Swaner, 2009).

BENEFICIARIES

Students

By participating in designated HIP courses, students are directly benefitting from the UCF High-Impact Educational Practices (HIP) Signature Experience Initiative. Examining student enrollment during the spring of 2018, we found several opportunities for engagement in HIP courses and experiences. In the Biology B.S. program, students could enroll in one HIP service-learning course for the Ecology. Evolutionary, and Conservation Track and two HIP service-learning courses for the Marine and Aquatic Track. The Nicholson School of Communication offered two HIP study abroad courses for the Advertising-Public Relations B.A., one HIP service-learning as well as 18 HIP study abroad courses for the Communication and Conflict B.A., four HIP study abroad courses for the Journalism B.A., and another four HIP study abroad courses for the Radio-Television B.A. The Mathematics Department gave students the opportunity to gain global experiences by offering eight HIP study abroad exchange courses. The Political Science Department also offered three HIP study abroad exchange courses as well as one HIP service-learning course. Finally, the Psychology Department made five HIP servicelearning courses available to students. These are just a selection of the high-impact courses recently offered in the College of Sciences. The number and variety of HIP course offerings for the College of Sciences is expected to increase this upcoming fall 2018 semester, already allowing more students to experience the benefits of high-impact practices.

Stakeholders

A variety of stakeholders also benefit from the College of Sciences' High-Impact Practices initiative. As identified above, students are served through increased opportunities to learn, experience, and apply knowledge. Faculty, department chairs, and undergraduate advisors develop greater program clarity as they review and consider program requirements and purposes. More comprehensive data regarding student participation and course offerings are advantages offered to leadership in the division of Academic Affairs, the office of Institutional Knowledge Management, and others focused on meeting and reporting out on the strategic goals of the university.

RECOMMENDATIONS

Upon completion of and reflection on this project, we made the following recommendations to the Division of Teaching and Learning:

- The Office of the QEP should continue providing funds directly to faculty who seek and obtain
 course designations such as Service-Learning, Integrative Experience, and Research
 Intensive to enhance teaching quality and facilitate the documentation of these s/HIP courses.
 Once designated, the university and college will be able to track student participation in HIPs
 and departmental advisors should find it easier to encourage strong student participation in
 these courses.
- Because the qualifying course application and designation processes will consider the characteristics and quality of reviewed courses, we recommend connecting the designation process to periodic review and assessment of these courses to ensure continued compliance with the criteria.

APPENDIX A: PROGRAM SPECIFIC PLANS

The following table includes summary information that identifies existing and potential approaches for the degree program to meet the UCF goal that 100% of graduates have the opportunity to enroll into a signature, High-Impact Practice course.

This includes information about currently offered and available High-Impact Practice opportunities for majors. When no courses were currently designated or required of majors, the following includes the most reasonable plan for incorporating these courses in the degree requirements. Actions and next steps are identified.

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Anthropology			
Anthropology, B.A. ALL TRACKS	ANT3701, ANT3940 (INT), ANT3943 (PRACT), ANT3949 (CO-OP), ANT3955 (SA), ANT4912 (DIR), ANT4941 (INT), ANT4949 (CO-OP), ANT4955 (SA), ANT4970H (HIM), ANT4516, ANT4586C	ANT4516 and ANT4586C are a core option (pick 1) ANT3701 not an option in Gen Anthro track	 Make the list of courses in catalog section identified as "High-Impact Learning Experience" (HILE of Methods & Practice Track) a requirement for all tracks Update list of HILE courses to reflect those in HIP list Remove ANT4906 (ind study) from current "HILE" list Review remaining curriculum for additional courses to add to list that may qualify for RI designation Submit courses for designation, possibly: ANT3701-SL; ANT4516-RI or IE; ANT4586-RI or IE
Anthropology, B.A. General Anthropology Track	See "All Tracks"		See "All Tracks"
Anthropology, B.A. Anthropological Methods and Practice Track	See "All Tracks"		After "all track" updates, review and clarify catalog narrative "Students may not receive credit towards Core Requirements: HI Learning Experience"

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Biology			
Biology, B.S. ALL TRACKS	BSC4312C (RI*,SL), BSC4445C (RI*), BSC4XXX Group Effort Applied Research (RI*), BOT4922 (CAP), PAZ4234, ZOO3713C, ZOO4910L	May not include BOT4922, see below.	 Develop list of HIP options (pick 1) to meet a requirement in each track and set as a major requirement Submit courses for designation, possibly: PAZ4234-SL, ZOO3713C-RI, ZOO4910L-SL/IR/RI
Biology, B.S. General Track	See "All Tracks"	All courses in HIP list currently meet restricted electives of track	See "All Tracks"
Biology, B.S. Ecology, Evolutionary, and Conservation Track	See "All Tracks"	All courses in HIP list currently meet either restricted electives or additional biology electives of track	See "All Tracks"
Biology, B.S. Marine and Aquatic Track	See "All Tracks"	All courses in HIP list currently meet either restricted electives or additional biology electives of track	See "All Tracks"

Biology, B.S. Plant Sciences Track	See "All Tracks" BOT4922 (CAP), BOT4970 (HIM)	Courses of the HIP list (above) currently meet additional biology electives of track	 See "All Tracks" BOT4922 and BOT4970 are required (pick one) in this track.
Biology, B.S. Pre-Health Professional Track	See "All Tracks"	All courses in HIP list meet either restricted electives or additional biology electives of track	See "All Tracks"
Biology, B.S. Zoology and Pre- Veterinarian Science Track	See "All Tracks"	All courses in HIP list meet either restricted electives or additional biology electives of track	See "All Tracks"

^{*}Only sections taught by the approved instructor are currently considered as RI designated

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

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Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Chemistry			
Chemistry, B.S.	CHM4912 (DIR), PSC3911	CHM4912 is required of all majors	Will benefit from Physics submitting PSC3911 for RI course designation
Chemistry, B.S. Biochemistry Track	CHM4912 (DIR), PSC3911	CHM4912 is required of all majors	Will benefit from Physics submitting PSC3911 for RI course designation
Forensic Science, B.S. Forensic Science Analysis Track	CHM4591 (INT)	CHM4591 is required of all majors	• Done
Forensic Science, B.S. Biochemistry Track	CHM4591 (INT)	CHM4591 is required of all majors	• Done

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Communication & I	Media, Nicholson School	of	
Advertising-Public Relations, B.A	MMC4411 (CAP), ADV4941 (INT), PUR4941 (INT), MMC3420, MMC3630, PUR3100	Capstone (MMC4411) and internship (ADV4941/PUR4941) are required of all majors	 Submit courses for designation, possibly: MMC3420-RI; MMC3630-SL, RI or IE; PUR3100-SL or IE May identify additional courses for HIP designation
Communication & Conflict, B.A.	COM4806 (CAP), COM4803	Capstone (COM4806) is required of all majors	 Submit COM4803 (internal restricted elective option) for designation, possibly SL or IE May identify additional courses for HIP designation
Human Communication, B.A. ALL TRACKS	COM3311 COM4941 (INT), COM3949 (CO-OP), COM3955 (SA), COM4912 (DIR), COM4955 (SA), COM4949 (CO-OP), COM4970 (HIM), SPC3949 (CO-OP), SPC4949 (CO-OP)	Five (5) tracks: General Human Communication, Business and Professional, Health Communication, Interpersonal Communication, Social Innovation and Activism	 Update "High-Impact Immersion Experience" section of catalog major requirements, adding COM3311 (if RI designated) and removing IS courses Submit COM3311 (required core) for RI designation
Journalism, B.A. Electronic News Track	RTV4681C (CAP)	RTV4681C is required capstone for track	 (optional) Consider developing a list of HIP courses (pick 1)

Journalism, B.A. Digital News Track	JOU4950 (CAP)	JOU4950 is required capstone for track	•	(optional) Consider developing a list of HIP courses (pick 1)
Radio-Television, B.A. Production Track	RTV4544 (CAP), RTV3571C	RTV4544 is required capstone for track	•	Submit RTV3571C (an elective option) for IE designation
Radio-Television, B.A. Media Management and Operations Track	RTV4544 (CAP) Incorrect - MM&O Track I	RTV4544 is required capstone for track nas no Capstone Requirement	•	Done Identify a course (that will be required of all in track) as Capstone (OR) Could also consider submitting a required course for an approved Signature Experience designation

Note: This reports only addresses the mass and human communication programs within the School

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Mathematics			
Mathematics, B.S. ALL TRACKS	MAA4226	MAA4226 could be enhanced to include active engagement of students in proof or project experience	 Update major requirements to include MAA4226 (required core course) as required capstone for all tracks As a part of the degree experience, consider including more business, government, and/or community service connections for students through projects and/or speakers
Mathematics, B.S. General Mathematics Track	See "All Tracks" and MAP4484		 See "All Tracks" Submit MAP4484 (required course) for RI designation
Mathematics, B.S. Engineering/ Physics Track	See "All Tracks" and MAP4103		 See "All Tracks" Submit MAP4103 (required course) for RI designation
Mathematics, B.S. Mathematical Biology Track, Mathematical Economics Track, Computational Track	See "All Tracks"		See "All Tracks"

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Physics			
Physics, B.S. ALL SPECIALIZATIONS	PHY4912 (DIR); PSC3911	Five (5) specializations: General Physics, Materials Physics, Optics and Lasers, Computational Physics, Astronomy	 Revise program to require PHY4912 (currently an option in the core) for degree *see below Submit PSC3911 (see Chem/a core option) for RI or IE designation
Physics, B.A. ALL SPECIALIZATIONS	PHZ3113		 Submit PHZ3113 (required core course) for IE designation
Physics, B.A. Education Specialization	See "All Specializations" and PHY4012	PHY4012 only required in Education specialization	 Submit PHY4012 (required course for specialization) for IE designation OR Designate as a capstone course for this specialization
Physics, B.A. Nanoscale Science and Technology Specialization	See "All Specializations" and ISC3471 (SL), ISC3417 (SL)	ISC courses are required of the specialization	See "All Specializations"
Physics, B.A. Biophysics, IT/Data Science, Tech Writing	See "All Specializations"		See "All Specializations"
			*Revise program to require PHY4912 or PSC3911 (currently both are options in the core). These could be included as options (pick one) for meeting the capstone requirement.

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

HIP courses include: Capstone (CAP), Experiential Learning (INT or CO-OP), Service-Learning (SL), Directed Independent Research (DIR or HIM), Research Intensive Courses (RI), Global Learning/Study Abroad (SA), and Integrative Experience Courses (IE)

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Political Science			
International & Global Studies, B.A.	POS3703, POS4961 (if credit bearing), PUP3203		Develop a list of HIP courses from which to choose AND/OR Submit POS3703 (required core course) for RI designation AND/OR Revise POS4961 (required core course) to earn credit and fulfill Capstone requirement
Political Science, B.A.	POS3703, POS4961 (if credit bearing), PUP3203	Two (2) Specializations: American Politics and Policy, International Relations-Comparative Politics	 Submit PUP3203 (all sections) for SL designation (currently an option in Area A) Develop a list of HIP courses from which to choose Submit POS3703 (required core course) for RI designation AND/OR Revise POS4961 (required core course) to earn credit and fulfill Capstone requirement
Political Science: Pre Law Track, B.A.	POS3703, POS4961 (if credit bearing), PUP3203		 Submit PUP3203 (currently an option in Area A) for SL designation Develop a list of HIP courses from which to choose Submit POS3703 (required core course) for RI designation AND/OR Revise POS4961 (required core course) to earn credit and fulfill Capstone requirement

Removed "Revise POS4961" per feedback from K.Hamann 8/1/18

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

HIP courses include: Capstone (CAP), Experiential Learning (INT or CO-OP), Service-Learning (SL), Directed Independent Research (DIR or HIM), Research Intensive Courses (RI), Global Learning/Study Abroad (SA), and Integrative Experience Courses (IE)

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Psychology			
Psychology, B.S. ALL TRACKS	PSY3074, PSY4049 (CAP), PSY4215	Six (6) Tracks: General, Clinical, Experimental, Human Factors Psychology, Industrial/Organizational Psychology, Neuroscience	•Submit PSY3074 (core requirement) for IE designation •Submit PSY4215 (restricted elective option) for RI designation

Update 8/7/18: PSY3024, PSY3074, and PSY4049 were approved at the course level with Integrative Experience (IE) course designation

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	Action
Sociology			
Social Sciences B.S.	tbd	Students pursue a core and three minors from various disciplines	 Develop a list of HIP options (pick 1) with general list of courses identified that will fulfill the HIP requirement (SL, SA, CAP, DIR, RI, IE)
Sociology, B.A.	SYA4450 (CAP), SYA3352, SYO3573, SYA4310C, SYA4900	SYA4450 required of all majors; SYA3352, SYO3573, SYA4310, SYA4900 are all elective options	 Develop a list of HIP options (pick 1) Submit courses for designation, possibly: SYA3352-RI, SYO3573-RI, SYA4310C-RI, SYA4900-RI or SL
Sociology, B.S.	Same as B.A.		Same as B.A.

Signature Experience: Select, upper-division HIP-designated courses with shared student learning outcomes that provide students with an integrative discipline-specific experience; these are integrated into the plan of study as culminating academic experiences.

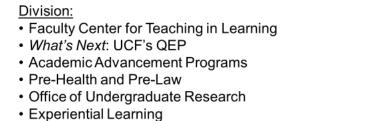
HIP courses include: Capstone (CAP), Experiential Learning (INT or CO-OP), Service-Learning (SL), Directed Independent Research (DIR or HIM), Research Intensive Courses (RI), Global Learning/Study Abroad (SA), and Integrative Experience Courses (IE)

Degree Program	HIP/Sig Experience Courses parenthetical information are approved designations	Information	ation Action	
Statistics				
Statistics, B.S.	STA4164		 Designate STA4164 as Capstone (optional) Consider also submitting STA4173, STA4222 and STA4504 for RI designation 	

NOTE: Per DTL: "HIP Signature Experience Requirement" will be added in the catalog under the "Degree Requirements" category in 2020-2021 for all majors.

APPENDIX B: INITIAL PRESENTATION OF HIGH-IMPACT PRACTICES INITIATIVE



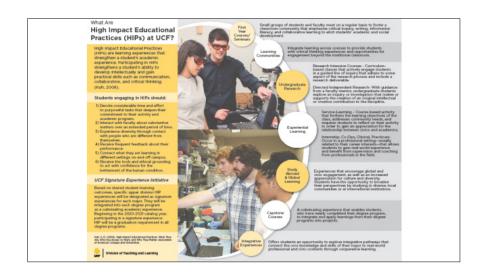


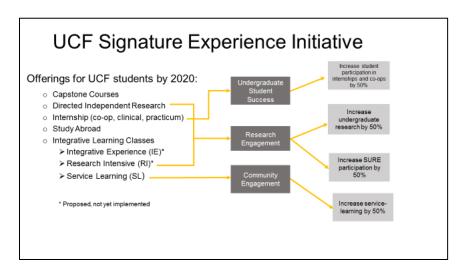
Operational Excellence and Assessment Support

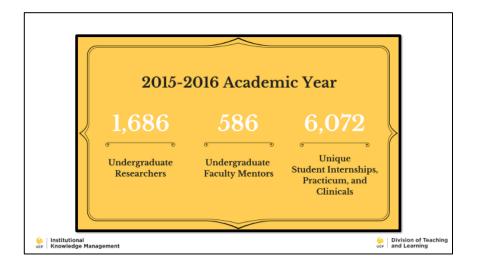


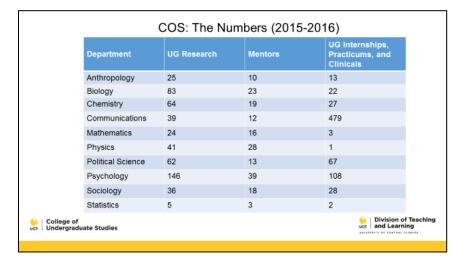


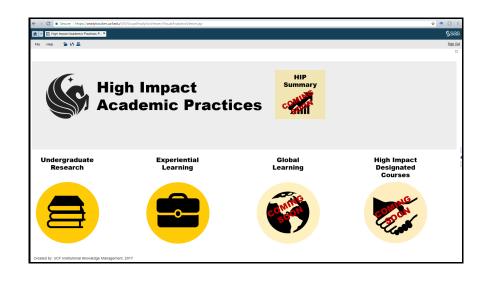
UCF High Impact Educational High Impact Practices for Tracking Purposes: Educational Integrative Learning Courses (IE) Capstone Courses · Research Intensive Courses (RI) · Directed Research **Practices:** · Service Learning Courses (SL) · First Year Seminars · Experiential Learning (internships, · Learning Communities **Current Initiatives** practicums, clinicals, co-ops) · Study Abroad & Global Learning (2) HIP Signature (3) HIP Course (1) IKM HIP Portal Experience Designations **Early Experiences** Initiative (SEI) Centralized database of Allow students to chose an Lower-division coursework HIP participation at UCF. appropriate High Impact (1000-2000 level) Upper- division coursework, course to fit their plan of selected by each degree Access provided through Not required for graduation at present time, but highly Helps UCF HIP involvement. encouraged. Successful completion of one SEI Data used for variety of Allows UCF to track data on is required for graduation HIP enrollment. starting in catalog year

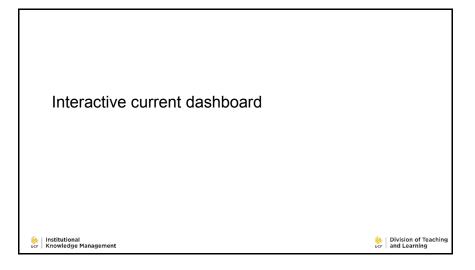


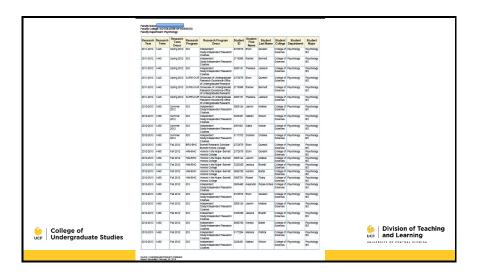


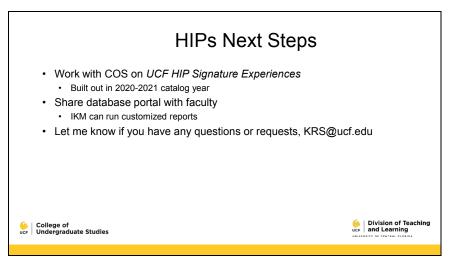








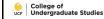






Office of Undergraduate Research

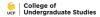
- · Getting Started
 - Peer advising, workshops, pre-research coursework
 - Class and club presentations
- Research Programs
 - OUR: Student grants, summer fellowships
 - Honors: Honors in the Major, Burnett Research Scholars
 - AAP: Research and Mentoring Program, McNair Scholars
- · Research Dissemination
 - Showcase of Undergrad Research Excellence, conference funding, Undergraduate Research
- · Faculty and Student Councils





Student Commitment: 3-20hrs/week

- · Zero or Multiple Credit Hours
 - Directed Independent Research, 0+ credits
 - Should be available in all departments
 - ~3 hrs+/week for each credit hour
- · Paid and Scholarships
 - Stipend, scholarship, or hourly
 - UCF programs: RAMP, McNair, SURF, HIM
 - Faculty mentor's grants
 - Work study opportunities if student qualifies





Showcase of Undergraduate Research Excellence Annual Event, April 5, 2018

- www.showcase.ucf.edu
- · Poster-based forum
- Research/creative projects (all disciplines)
- · Scholarships awarded (Over \$25,000!)
- · Applications due February





Fall Faculty Workshops

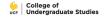
- · Faculty Resources and Opportunities in Undergraduate Research
 - Tuesday, August 29, 2017, 10:00-11:00 am
 - Monday, October 9, 2017, 2:00-3:00 pm
- · Effective Mentoring in Undergraduate Research
 - Tuesday, September 5, 2017, 10:00-11:00 am
 - Monday, October 16, 2017, 2:00-3:00 pm
- · Integrating Research into the Curriculum
 - Tuesday, September 12, 2017, 10:00-11:00 am
 - Wednesday, October 25, 2017, 2:00-3:00 pm





Encourage new faculty to attend workshops and/or meet one-on-one with us Invite OUR to leadership team meetings and/or faculty meetings

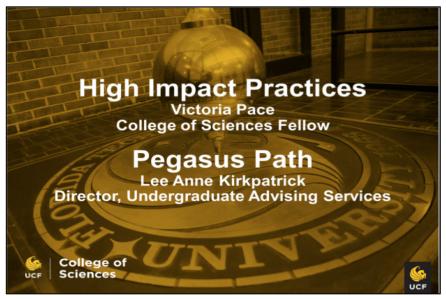
OUR-Next Steps





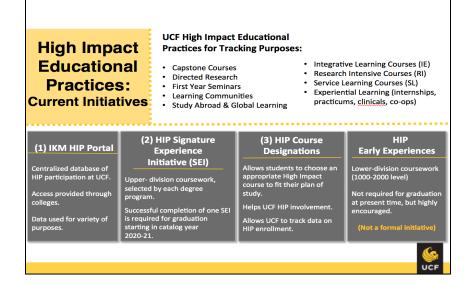


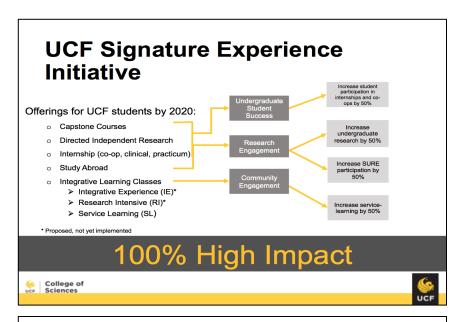
APPENDIX C: JOINT HIP AND PEGASUS PATH PRESENTATION

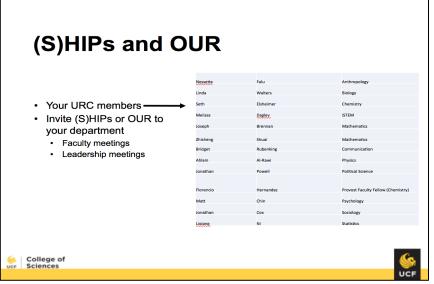




Welcome and Introductions Introductions Sign In Sheet







Some Key Components of (S)HIPs

Most courses will only include one or two of these:

- Research
- Global Learning
- Collaborative Assignments and Projects
- Links to Employers and/or Community Service Organizations

For more information:

https://www.aacu.org/leap/hips





(S)HIPs Next Steps

- · Work with COS on UCF HIP and Signature Experiences
 - · Communicate this initiative to faculty in your department
 - · Ask your faculty for information about their (potentially) relevant courses
 - · Please send me information on the following (S)HIPs:
 - Major requirements or courses that are already designated as Research/Thesis, Internship, Study Abroad, Service Learning, Capstones that include a culminating project (individual or group)
 - Courses that have some components of HIPs, but are not yet designated (we may be able to work together to facilitate designation, if desired)
 - Coverage information

 required of all majors OR average enrollment per year
- Let me know if you have any questions or relevant course info: Victoria.Pace@ucf.edu





Note: Additional slides were presented by Lee Anne Kirkpatrick for the Pegasus Path Project. These have been removed for brevity and focus.

APPENDIX D: DESIGNATED SERVICE-LEARNING COURSES

Department	Course ID	Course Title	Course Start Date	Original and Current Instructor(s)	Notes	
Biology	BSC 3312	Principles of Marine Biology	Spring 2017	Dr. Linda Walters		
Biology	BSC 4312	Advanced Marine Biology	Spring 2012	Dr. Linda Walters		
Biology	BSC 4861L	Urban Ecological Field Studies	Fall 2009	Alaina Bernard Jennifer Elliott		
Biology	BSC 5316	Marine Conservation Biology	Spring 2011	Dr. Linda Walters		
Nicholson School of Communication	COM 1000	Introduction to Communication	Fall 2009	Steven Neel		
Physics	ISC3471-formerly PHZ3462	Nanoscience and Nanotechnology- formerly Nanoscience I: An Introduction	Updated for Fall 2018- initially Fall 2016	Dr. Enrique Del Barco Dr. Aniket Bhattacharya Patrick Schelling		
Physics	ISC3417-formerly PHZ3466	Computational Nanoscience- formerly Nanoscience III: Virtual Lab	Updated for Spring 2019- initially Spring 2016	Dr. Enrique Del Barco Dr. Aniket Bhattacharya Patrick Schelling		
Psychology	PSY 4942	Instructional Experiences in Undergraduate Psychology	Spring 2018	Karen Cox		
Psychology	SOP 3723	Cross Cultural Psychology	Spring 2017	Dr. Martha Hubertz	SL designation limited to Dr. Martha Hubertz's section Not clear whether SL designation for SOP 3742 will apply to future courses	
Psychology	SOP 3742	Psychology of Women	Fall 2017	Dr. Martha Hubertz		
Political Science	PUP 3203	Environmental Politics	Fall 2006	Dr. Peter Jacques		
Nicholson School of Communication	SPC 1608H	Honors Fundamentals of Oral Communication	Fall 2005 (estimated)	Dr. Christine Hanlon	No SL designation Fall 2009 - Spring 2016;SL designation reinstated in Fall 2016	