FORM A
Board of Regents, State of Iowa

**REQUEST TO IMPLEMENT A NEW BACCALAUREATE, MASTERS,
DOCTORAL, OR PROFESSIONAL DEGREE PROGRAM**

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent university to demonstrate need and demand as well as the university's ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: _Iowa State University_____

CIP Discipline Specialty Title: _Medical Informatics_____

CIP Discipline Specialty Number (six digits):   ___51.2706_____

Level: B   _____   M   ___X_____   D   _____   P   _____

Title of Proposed Program: _Master of Digital Health_____

Degree Abbreviation (e.g., B.S., B.A., M.A., Ph.D.): _____M.DH. _____

Mode(s) of Delivery (check all that apply): On-campus (face-to-face) ___   Off-campus (face-to-face) ___ Online _X___   Hybrid _____   Other _____

Approximate date to establish degree: Month   __Fall _____   Year   ___2024_____

Contact person: (name, telephone, and e-mail):   Kira Werstein, 515-294-8009, werstein@iastate.edu

College that will administer new program: __College of Human Sciences_____

Please provide the following information (use additional pages as needed). Do not use acronyms without defining them.

1.   Describe the proposed new degree program, including the following:

   a.   A brief description of the program. If this is currently being offered as a track, provide justification for a standalone program.

   The Master of Digital Health (MDH) Program is an innovative and transformative endeavor that addresses the intersection of healthcare, technology, and data analytics. While closely related to programs within the Kinesiology Department, the MDH program distinctively focuses on leveraging digital tools and data analytics to enhance human health outcomes. This unique emphasis differentiates it from existing programs and marks it as a pioneering initiative in the state of Iowa and the Midwest region.

   Specifically, the MDH Program includes the use of information and communications technologies in health professions to manage illnesses and health risks, enhance efficiency of treatment delivery, make interventions more personalized and precise, and promote health and wellness. Digital health has a broad scope and includes the use of wearable devices, mobile health, telehealth, and health information technology. Students in the MDH Program will learn to incorporate digital technologies into the delivery of exercise and health interventions, analyze individual and population-level data to develop efficient solutions for target populations, and integrate innovative technologies to target multiple layers of influence to empower patients and populations in the self-management of their health and the health of their families.

The MDH program's primary objective is to equip students with specialized knowledge and skills needed to navigate the evolving landscape of digital health, where technology-driven interventions are becoming increasingly pivotal. By offering the MDH as a standalone program, we recognize the profound impact of digital health technologies on healthcare and health systems broadly and the imperative for a comprehensive curriculum that addresses this rapidly growing field.

While the MDH program shares certain commonalities with other master's programs at ISU such as Human Computer Interaction (HCI), Computer Science (CS), Athletic Training (AT), and Healthcare Analytics and Operations (MSHAO), its core focus on the integration of digital health tools within health systems broadly sets it apart. The program encompasses a wider spectrum that encapsulates wellness promotion, disease prevention, telehealth, and information technology, allowing students to engage with multifaceted aspects of digital health that extend beyond the domains of these related programs.

Furthermore, collaborating between departments and colleges is essential to fostering interdisciplinary perspectives, enabling students to cultivate a holistic understanding of digital health's transformative potential. We have established an openness to collaboration between the MDH program and each of the related master's programs. The willingness of departments like HCI, CS, MATR, and MSHOA to collaborate by allowing cross-enrollment not only enriches students' learning experiences but also solidifies the program standing as a flagship initiative for the institution.

The MDH program's distinctiveness, focus, and potential for interdisciplinary collaboration position it as a pioneering force within the healthcare and technology domains. Offering it as a standalone program reflects our commitment to providing students with a dedicated platform to engage with the evolving landscape of digital health, while also fostering synergistic collaborations that elevate the program's impact across multiple disciplines.

b.   A statement of academic objectives;

   The Master of Digital Health Program learning objectives aim to:

· Incorporate digital technologies such as mobile applications, sensors, wearables, and telehealth into the delivery of health interventions (e.g. exercise, injury prevention, physical therapy and rehabilitation, cardiovascular health, sleep improvement, chronic disease management, smoking cessation).
· Analyze individual and population-level data to develop efficient solutions for target populations.
· Integrate innovative technologies to target multiple layers of influence including patients, providers, programs, environments, and policies as to empower patients in the self-management of their physical activity and health and the health of their families.

c.   What the need for the program is and how the need for the program was determined;

Health innovation in the digital domain is happening at an extraordinary rate. According to the World Health Organization (WHO), due to digital technologies, the world's population has never been more interconnected. As such, WHO aims to "harness the power of digital technologies and health innovation to accelerate attainment of health and well-being" (WHO, 2023).

In 2017, the Department of Health and Social Care in England called for the "need to develop and invest in the capability and capacity of digital change leaders." In response, Imperial

College London, in partnership with Harvard Medical School, developed the Master's of <u>Digital Health Leadership</u>. The program has a strong (60+ students) and growing annual enrollment.

While the degree name, "Digital Health," is not yet mainstream, degree programs are emerging throughout the country. This evidence of a growing industry in health technologies has prompted an increase in student demand. Therefore, leading health-focused universities including <u>Harvard Medical School</u>, <u>Stanford Medicine</u>, and <u>Brown University</u> are examples of recently developed programs and certificates in Digital Health (DH).

In order to determine the need for the program, KIN faculty completed a thorough search of DH programs in each state across the United States, followed by a search of programs in the world. Faculty reached out and consulted with the director of the Digital Health Program at the University of Denver (UD) to learn about the demand for the program from students and the need for graduates with a DH expertise in the marketplace. The UD opened enrollment into their program in 2020 with a cohort of 35 students. As of August of 2023, the UD has more than 350 students enrolled in their DH program which demonstrates strong demand and growth in this field of study.

In addition, Hanover Research, an external research organization was recruited to provide an academic program assessment by reviewing student and labor market demand metrics to assess program viability, in addition to competitor trends among similar programs to inform program design. Hanover reported that since this is a fairly new field of study there is no CIP code for this field. Therefore, Hanover used the following methodological approach:
·   As metrics of student demand, Google search and graduate publication trends were reviewed,
·   As metrics of labor market demand, national job postings analytics and relevant secondary literature were reviewed,
·   To understand programmatic trends, seven relevant programs were benchmarked, based on the market analysis data.

Hanover stated that based on a holistic review of this data, they recommend to move forward with the proposed MDH program. Furthermore, they reported that "student interest in the digital health field is growing based on trends in online searches for digital health topics and graduate publications using the keyword 'digital health.' Additionally, a review of national job postings and secondary literature suggests a positive employment outlook for graduates of digital health programs." The complete Hanover Report is attached in the supplemental documents.

d.   The relationship of the proposed new program to the institutional mission and how the program fits into the institution's and college's strategic plan;

ISU MISSION AND STRATEGIC PLAN
An innovative MDH Program is in direct alignment with the College of Human Sciences and Iowa State University's mission and strategic plan to create, share, and apply knowledge to make our students, Iowa, and the world better.

Vision. The addition of the MDH Program is also in alignment with the vision of Iowa State University to advance the land-grant ideals of putting science, technology, and human creativity to work. As future innovations transform the field of health, it is important that ISU Kinesiology Faculty lead the way in integrating the latest technology in their teaching, research, and outreach.

In addition, the MDH Program fits within the Kinesiology Department's mission and vision by aligning with its core values and enhancing its commitment to promoting health and well-being through the integration of technology and physical activity.

The Department of Kinesiology mission is to "promote health and well-being by creating and disseminating knowledge about physical activity and healthy living to improve the lives of citizens of Iowa, the United States, and the world."

The MDH Program contributes to the mission by equipping students with specialized knowledge and skills in using DH technologies to promote physical activity and healthy living. By integrating technology into research, interventions, and health promotion strategies, graduates can have a significant impact on improving the health and well-being of individuals and communities locally, nationally, and globally.

The Department of Kinesiology vision is to "be among the best kinesiology departments in creating knowledge, translating discoveries into practice, and preparing individuals with expertise in the science of physical activity as it impacts health and well-being."

The MDH Program aligns with the Kinesiology vision by:

- Fostering research in the emerging field of DH within kinesiology. Students will engage in advanced study and capstone projects that contribute to the growing body of knowledge in this interdisciplinary area, including the impact of digital technologies on physical activity, exercise behavior, and health outcomes.

- Translating discoveries into practice by preparing students to apply their technological insights to practical applications. Graduates will be skilled at translating DH discoveries into effective interventions and strategies that can be implemented in various settings, such as healthcare, fitness, and wellness industries.

- Enhancing students' expertise in the science of physical activity by integrating technology as a core component. This prepares students to understand how DH tools can be utilized to assess, monitor, and improve physical activity behaviors, ultimately leading to enhanced health and well-being.

- Offering a cutting-edge MDH Program demonstrates the Kinesiology Department's commitment to staying at the forefront of research and innovation in the field of Kinesiology and Health.

In summary, an MDH Program would directly contribute to the department, college, and university mission by promoting health and well-being through the use of DH technologies. It aligns with the university vision by fostering knowledge creation, translating discoveries into practice, and preparing graduates to become leaders in the evolving landscape of DH, making a meaningful impact on the lives of individuals and communities both locally and globally.

Values. The addition of the MDH embraces the values of Iowa State University's Principles of Community. Specifically, an online MDH would recruit students from all over the world and promote student collaborations with various geographic locations and demographic markets. This outcome is in direct alignment with Iowa State University's values of Cooperation, Richness of Diversity, Access, and Excellence.

e.   The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university. Will the proposed program duplicate existing programs at the university?

After a thorough search and several meetings with other departments on campus including Human Computer Interaction (HCI), Computer Science (CS), Athletic Training (AT), and Healthcare Analytics and Operations (MSHAO), it was determined that the MDH is a unique program at ISU, in Iowa, and in the Midwest. As stated in question 1.a., while the MDH program shares certain commonalities with other master's programs, its core focus on integrating digital health tools within health systems broadly sets it apart. Following meetings with other

departments (i.e. HCI, CS, MATR, and MSHOA), we contend that the addition of the MDH Program will recruit a unique student population while having a synergistic effect across programs.

f.   Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

The MDH Program is an appropriate fit for the current world-renowned faculty in the Kinesiology Department who are engaged in high-impact research areas including biomechanics, exercise physiology, exercise psychology, physical activity epidemiology, motor learning and control, ergonomics, athletic training, and health promotion.

Kinesiology faculty currently integrate DH approaches in their teaching, research, and outreach. A few specific examples include research by Dr. Elizabeth Stegemoller, who examines virtual treatment interventions for Parkinson's patients, Dr. Ann Smiley, who examines virtual physical activity sessions and effects on motor control and sequencing in youth, Dr. Jason Gillette, who examines ergonomic techniques with emerging technology, Dr. D.C. Lee, who examines high-tech treadmills and weightlifting machines on aerobic, strength, and health-outcomes, Dr. Angie Brellenthin, who uses the UK Biobank accelerometer, hospital admissions, and death registry data to examine associations between physical activity and health behaviors and chronic disease outcomes, and Dr. Greg Welk who examines the use of social media apps in health promotion.

In their teaching, KIN Faculty also integrate DH tools and solutions. For example, in the course, "Health and Exercise: Behavior Change" (KIN467/567), Dr. Kira Werstein has a unit devoted to teaching students the use of mobile health tools for individual and population-level health-behavior interventions. In the course, "The Sociology of Physical Activity and Health" (KIN360), Dr. Brellenthin has a unit focused on examining the digital divide as a social determinant of health disparities as well as exploring how internet technologies have changed the practice of medicine over time. In the course, "Therapeutic Exercise and Rehabilitation Interventions" (ATR545), Dr. Jacob Moore teaches on topics of informatics and the use of DH tools to gather data to evaluate patient weaknesses and design programs that prioritize objectives of programming. In addition, Dr. Werstein uses a telehealth approach with motivational interviewing for health-behavior change in her health coaching outreach with individuals and organizations.

Digital health has become an integral part of the field of Kinesiology, enhancing research, education, and practical applications related to human movement and physical activity. The following are several ways in which DH intersects with Kinesiology:
1. **Data Collection and Analysis:** DH technologies, such as wearable fitness trackers, smartwatches, and mobile apps can collect immense amounts of data related to an individual's physical activity, heart rate, sleep patterns, and more. Kinesiologists can use this data to gain insights into exercise patterns, performance, and health outcomes.
2. **Physical Activity Monitoring:** DH tools enable real-time monitoring of physical activity levels and sedentary behavior. This data can be used to assess an individual's daily movement patterns in a physical therapy or occupational therapy setting, set personalized activity goals within health coaching and in clinical settings, and provide feedback to encourage active lifestyles.
3. **Biomechanical Analysis:** Motion capture systems and wearable sensors can be used to analyze human movement biomechanics accurately. Kinesiologists, physical therapists, athletic trainers, occupational therapists, coaches, and personal trainers can utilize this technology to study gait analysis, technical performance, rehabilitation, and ergonomics.
4. **Telehealth and Remote Monitoring:** DH facilitates telehealth services, allowing kinesiologists, health coaches, and clinicians to conduct remote consultations,

assessments, and interventions. It can be especially beneficial for individuals in remote areas or those with limited mobility. Telehealth increases the reach and accessibility of exercise interventions and health education resources in order to decrease health disparities.

5. **Health Behavior Interventions:** DH interventions, such as mobile apps and online platforms, can be designed to promote healthy behaviors and physical activity adherence. Kinesiologists and clinicians can develop and evaluate these interventions to help people adopt and maintain active lifestyles.

6. **Virtual Reality and Simulation:** Virtual reality technology can be employed to simulate real-life movement scenarios, providing valuable training opportunities for athletes, fire-fighters, police officers, marines/special ops teams/arm forces, rehabilitation patients, and the general population.

7. **Big Data and Health Analytics:** With the abundance of data generated through DH technologies, kinesiologists, clinicians, health analysts, and data scientists can apply big data analytics to study population-level trends, identify risk factors, and make evidence-based decisions.

8. **Healthcare Integration:** DH tools can be integrated into healthcare settings, facilitating collaboration between kinesiologists and healthcare professionals to optimize patient care and rehabilitation programs.

9. **Health Education and Coaching:** DH platforms can deliver personalized health education materials and coaching programs to individuals seeking guidance on physical activity, exercise routines, and overall well-being.

10. **Research Advancements:** DH accelerates research capabilities by providing new ways to collect data and track outcomes, leading to advancements in kinesiology and related fields.

In addition, it is important that the major of DH "lives" within the Department of Kinesiology, as this would ensure a health-centered view of technological innovation. To provide a rationale and comparison, many teaching platforms, including Canvas, are designed by software engineers. While these engineers have an in-depth understanding of coding and software, they do not have the pedagogical expertise and experience to anticipate problems that instructors and students face. As such, without the expertise of pedagogical experts, they are unable to optimally design effective teaching platforms.

In the same way, expertise in software engineering or IT alone is not enough to design effective DH tools and interventions. Without the knowledge of the biological and psychological underpinnings of the field of Kinesiology and Health, digital technologies lack the ability to sustain adherence and effectively develop health-based solutions. The demand for fluency in both technological health tools and the biological and psychological basis of physical activity and health is critical for the effective design and analysis of practical solutions for disease prevention and enhancing health and well-being.

In summary, the placement of the MDH Program within the Kinesiology Department is imperative to synergize the dynamic intersection of digital innovation and health sciences. This unique positioning not only ensures the development of effective digital health interventions but also reflects a holistic approach that is optimally addressed in the Department Kinesiology.

g.   Describe the personnel, facilities, and equipment necessary to establish and maintain a high quality program. Include any reallocations from other programs or areas of the university.

In order to establish and maintain a high quality MDH program, the Department of Kinesiology will need two additional faculty positions, a program director, faculty summer support to design new courses, a P & S staff position, an advisor, and equipment for recording online lectures. The primary reason that additional faculty positions are needed is due to the need for new course

development. The courses in this new program are not currently offered and would need to be designed and staffed.

The Kinesiology Department will request additional funds to support the needs of the program start-up costs with Phase II of the Degrees of the Future Initiative, which is a part of Iowa State University Strategic Plan. The College of Human Sciences has funding to purchase the recording equipment needed to produce high quality online content. Based on the growing enrollment of peer institutions and demands from industry, it is projected that the program would support itself with student credit revenues within three years.

h.   How does student demand for the proposed program justify its development? What are the anticipated sources of students to enroll in this new program?

Professionals with an interest in the intersection of health and technology aim to grow their careers with a degree in digital health. Examples of career paths in digital health include health-care IT, clinicians, tele-medicine, telecare (e.g. activity monitoring, remote medication management), mHealth apps (e.g. wearables, glucose monitors, activity trackers, medical apps, fitness apps), monitoring services (e.g. independent aging solutions, chronic disease management, post-acute care), health analytics (e.g., health insurance companies), software engineers, web application developers, and product engineers. More on student demand and workforce needs in question three.

2.   Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.

a.   Undergraduate

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	0	0	0	0	0	0	0
Non-Majors	0	0	0	0	0	0	0

b.   Graduate/Professional

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	35	60	90	100	100	100	100
Non-Majors	3	5	5	5	7	10	10

3.   Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the foreseeable future (provide the sources of data used to estimate workforce need and demand).

National staffing shortages in health-care are estimated to grow. According to Mercer, an industry market analytic firm, by 2025, it is estimated that there will be a "shortage of approximately 446,000 home health aides, 95,000 nursing assistants, 98,700 medical and lab technologists and technicians, and more than 29,000 nurse practitioners." While a health app, in itself, cannot replace a healthcare provider, the use of digital technologies can increase efficiency and reduce the need for repeat follow up visits with providers. For example, virtual telesitters reduce the need for a one to one nurse to patient ratio by using digital technologies to monitor multiple patients at once and thereby significantly reducing the total number of healthcare providers needed in a hospital or clinic.

In addition, according to the U.S. Bureau of Labor Statistics, careers in health information technologies and health management analysts are expected to grow by 17 and 11% respectively, much faster than average, from 2021 to 2031. Therefore, professionals with an expertise in DH possess innovative technological skills for efficient individual health management and will likely become exceptionally valuable as staffing shortages continue to grow.

4.   The dean's office in the academic college proposing the new program is required to contact the corresponding dean's offices at the other two Regents universities (if there is no corresponding college, consider related programs in other colleges or contact the Provost's office for guidance). In some cases, such as for an interdisciplinary program, more than one college at the other universities may need to be contacted. Please summarize how this cross-institutional outreach was completed:

   a. Date that Form A was sent to dean's offices at the other two Regents universities.

College of Human Sciences (CHS) Associate Dean Bob Reason shared the Digital Health program description with Dr. Amanda Thein, Associate Provost for Graduate and Professional Education at the University of Iowa in August 2023 and Dr. Dr. Gabriela Olivares, Associate Dean of the Graduate College at the University of Northern Iowa. Dr. Thien subsequently shared the program description with Drs. Gary Pierce, DEO of Health and Health and Human Physiology, Dr. Megan Lundstrom, Athletic Training program, and Dr. Maggie Chorazy, Associate Dean of the College of Public Health. CHS Dean Laura Jolly reached out later to share Form A with the appropriate Dean's offices. On October 27, 2023 Form A was sent to Dr. Brenda Bass, Dean of the College of Social and Behavioral Sciences at the University of Northern Iowa and on November 5, 2023 to Dr. Edith Parker, Dean of the College of Public Health at the University of Iowa and Dr. Sara Sanders, Dean of the College of Liberal Arts and Sciences at the University of Iowa.

   b. Date and format (email, telephone, video, in-person) of discussions between the dean's offices, and names/titles of those who participated.

CHS Dean Laura Jolly corresponded via e-mail with Dr. Brenda Bass, Dean of the College of Social and Behavioral Health at the University of Northern Iowa on October 27, 2023. Two video calls were held with colleagues from the University of Iowa. The first call included CHS Dean Laura Jolly, Dean Edith Parker, and Associate Dean Maggie Chorazy both from the College of Public Health on November 10, 2023. A second call included Dr. Christine Getz, Associate Dean for Graduate Education and Outreach and Engagement in the College of Liberal Arts and Sciences and Dr. Gary Pierce, DEO of Health and Human Physiology on November 17, 2023.

   c. Summary of feedback received from the other two Regents universities, including any concerns raised. Where relevant, describe current or planned collaborations related to the program.

University of Northern Iowa: No concerns or questions were raised. Expressed interest in future discussions about potential pathways for some of UNI's undergraduate Kinesiology students to pursue this MS degree.

University of Iowa: The College of Public Health indicated the proposed program is not a direct conflict with their programs. They encouraged mapping courses/titles with the accreditation requirements. The College of Liberal Arts and Sciences (LAS) does not offer a digital health degree and the proposed courses in the ISU program are not overlapping with their courses. They were complimentary of the design of the program as online and 30 credit hours. There are faculty in LAS with research interests in digital health. There may be opportunity for future research collaborations.

d. Was the proposal modified to reflect these discussions? If so, describe.

There were no changes made to the proposal based on the discussions with UNI or UI.

5.   List other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)

If the same or similar program exists at another institution of higher education in Iowa (other than those Regent universities noted above), respond to the following questions:

A thorough search of Digital Health programs in the state of Iowa yielded no findings.

a.   Describe collaboration efforts with other institutions.

We aim to offer the MDH as a standalone program at ISU. We discuss the rationale for this standalone program in question one.

b.   With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.

Please see question one.

c.   Has the possibility of an inter-institutional program or other cooperative effort been explored?

Please see question one.

d.   Are the other programs similar to the proposed program at comparable quality and cost?

Please see question one.

6.   If there are plans to offer the program off campus, online, or a blended modality, briefly describe these plans, including potential sites and possible methods of delivery instruction. Will off-campus delivery require additional HLC or other accreditor approval?

We anticipate that many students in this program will be working professionals. Therefore, we aim to offer the MDH Program online and asynchronously to provide flexibility students with challenging schedules.

7.   Will the proposed program apply for programmatic accreditation? When?

We plan to apply for accreditation from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) when we are eligible, have support of our institution's leadership and administration, and have a successful cohort of students graduate from the program.

8.   For undergraduate programs: Will articulation agreements be developed for the proposed program? With whom?

At this time, there are no plans for articulation agreements.

9.   Describe any opportunities for experiential learning (e.g. internships, clinicals, research, community engagement/service learning).

Students in the MDH Program will complete a capstone project which will focus on the practical preparation of the student for the job market. Faculty in the Kinesiology Department are currently securing partnerships with businesses and organizations in industry to provide students with applied, real-world learning opportunities.

10. From where will the financial resources to cover the costs for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

Faculty in the Kinesiology Department are submitting Phase II of a proposal to the university to apply for funding through the Degrees of the Future Initiative to support the start-up costs associated with commencement of the program. Therefore, the funds will come from the university and from the College of Human Sciences to begin the program. Based on the growing enrollment of peer institutions and demands from industry, it is projected that the program would support itself with student credit revenues within three years. The proposed program will not be dependent on grants, contracts, gifts, or reallocations.

11. Include any additional information that justifies the development of this program.

MASTER OF DIGITAL HEALTH CURRICULUM

Department of Kinesiology
College of Human Sciences
Iowa State University

PROGRAM DESCRIPTION

The Department of Kinesiology offers a 12-24-month, online, 30-credit professional master's degree in Digital Health. The overall academic goal is to prepare students to use of information and communications technologies in health professions to manage illnesses and health risks, enhance efficiency of treatment delivery, make interventions more personalized and precise, and promote health and wellness. Students will be taught digital health knowledge and skills including the use of wearable devices, mobile health, telehealth, and health information technology. Students will be taught to incorporate digital technologies into the delivery of exercise and health interventions, analyze individual and population level data to develop efficient solutions for target populations, and integrate innovative technologies to target multiple layers of influence to empower patients and populations in the self-management of their health and the health of their families. This is a coursework only program of study.

PROGRAM OBJECTIVES

- Incorporate digital technologies such as mobile applications, sensors, wearables, and telehealth into the delivery of health interventions (e.g. exercise, injury prevention, physical therapy and rehabilitation, cardiovascular health, sleep improvement, chronic disease management, smoking cessation).
- Analyze individual and population level data to develop efficient solutions for target populations.
- Integrate innovative technologies to target multiple layers of influence including patients, providers, programs, environments, and policies as to empower patients in the self-management of their physical activity and health and the health of their families.

PROGRAM ACCREDITATION

This curriculum has been designed with the digital health program competencies from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

COURSES

(2) Foundations of Digital Health
(2) Research Methods and Ethics of Health Technologies
(3) Analytics and AI for Health Strategies
(3) Behavioral Health and Technology: Strategies for Digital Adoption, Policy, and Impact
(3) Digital Health Solutions for Physical Activity and Health
(3) Health Data Management and Interoperability
(3) Prognostic Insights and Innovative Rehabilitation Techniques for Advancing
(3) Precision Medicine: Tailoring Digital Health Solutions
(3) Disease Management and Public Health
(3) Leading Inter-Professional Teams in Health Initiatives
(2) Capstone
Total Credits = 30

Foundations of Digital Health (DHXXXX, 500 level)
Course description: Multidisciplinary nature of harnessing technology in health initiatives. Evolution of digital health, agile methodologies for designing interventions, and symbiotic relationships of innovation and health systems efficiency. Funding strategies and business models for digital health startups.
Pre-requisites: Admission to DH (or related online MS) program or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Understand the digital health landscape
- Describe the disciplines that are needed to successfully use digital technologies in the field
- Describe the historical context and evolution of digital health technologies
- Describe how healthcare and health systems evolve on a global scale to keep up with emerging trends
- Understand principles of agile methodologies, personalized design, and technology adoption frameworks to develop digital health interventions
- Discuss how innovation/entrepreneurship have advanced efficiency, accessibility, and scalability in healthcare and health initiatives over time
- Describe business models for digital health startups, funding opportunities, and venture capital in the digital health ecosystem

Assessment Example: Written Essay

> **Description**: Students are required to write a comprehensive essay on a selected topic within the digital health landscape. Topics may include the historical evolution of a specific digital health technology, the impact of entrepreneurship on healthcare accessibility, or the analysis of a notable digital health startup business model. Students must thoroughly research their chosen topic, provide historical context, and critically analyze its significance in the digital health field. The essay should demonstrate their understanding of digital health concepts, historical evolution, and innovative aspects.

> **Assessment Criteria**: The assessment is graded based on the depth of research, clarity of writing, critical analysis, and the ability to effectively communicate key concepts related to digital health. Students should also demonstrate their understanding of agile methodologies, technology adoption frameworks, and the role of innovation in healthcare and health systems.

> **Purpose**: This assessment allows students to delve into specific aspects of digital health, apply their knowledge of the course's learning objectives, and showcase their research and analytical skills. It encourages critical thinking and the ability to communicate complex ideas in writing, which are essential skills for success in the digital health field.

Research Methods and Ethics of Health Technologies (DHXXXX, 500 level)
Course description: Methods and techniques for designing and interpreting research in the digital health ecosystem. Ethical, legal, and regulatory dimensions of health technologies to critically appraise research and assess the ethics of various health technologies including wearables, apps, and social media. Ethical intricacies and regulatory landscape of emerging health innovations.
Pre-requisites: Admission to DH (or related online MS) program or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Analyze methods and techniques used in the design and interpretation of research involving the digital health ecosystem
- Describe ethical, legal, and regulatory considerations in digital health
- Critically appraise research
- Critique the ethics of the use of various health technologies (e.g. product, social media, health aps, wearables) and the development of new technologies

Assessment Example: Oral Presentation

Description: Students are tasked with selecting a specific health technology or digital health research study and presenting it orally to the class. The presentation should include an analysis of the research methods and techniques employed in the study, and evaluation of ethical, legal, and regulatory considerations relevant to the chosen technology or study, and a critical appraisal of the research outcomes. Students are encouraged to engage their peers in discussion and debates about the ethical challenges and implications of the technology or research.

Assessment Criteria: The assessment is evaluated based on the clarity and effectiveness of the oral presentation, the depth of analysis regarding research methods and ethics, the ability to critically appraise the selected research, and the quality of engagement and discussions. Students should also demonstrate their understanding of ethical intricacies and regulatory aspects in the digital health ecosystem.

Purpose: This assessment aims to develop student's research analysis and presentation skills, their ability to assess and critique the ethics of health technologies, and their understanding of the ethical and regulatory landscape of digital health. Oral presentations also promote active class participation and peer-to-peer learning.

Analytics and AI for Health Strategies (DHXXXX, 500 level)
Course description: Structured query language (SQL), power BI/Tableau BI, R/Python, machine learning, and artificial intelligence (AI) to analyze exercise and health data. Data analytics applications and health systems, data mining and visualization, predictive modeling for health outcomes.
Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Analyze exercise and health data using: Structured Query Language (SQL), Power BI/Tableau BI, and R/Python, machine learning, or artificial intelligence
- Apply data analytics in health systems and healthcare
- Understand data mining and data visualization
- Understand predictive modeling with health outcomes and health behaviors
- Utilize business intelligence tools to enhance exercise and health strategies
- Apply machine learning techniques to analyze and derive insights from health related data, enabling data-driven decision making in the context of exercise and health strategies

Assessment Example: Written Report

> **Description**: Students are required to select a real-world health-related data set (e.g., fitness tracker data, electronic health records, public health data sets) and perform a comprehensive analysis using SQL, power BI/Tableau, R/Python, and machine learning techniques. They must compile their findings, insights, and visualizations into a written report. The report should include an explanation of the data mining and data visualization methods used, the results of predictive modeling on health outcomes or behaviors, and recommendations for exercise and health strategies based on their analysis.

> **Assessment Criteria**: The written report is evaluated based on the depth and accuracy of the analysis, the clarity of data visualizations, the application of machine learning techniques, and the relevance of recommendations to exercise and health strategies. Students should demonstrate their ability to apply data analytics and machine learning tools effectively in a healthcare or health system context.

> **Purpose**: This assessment aims to assess student's proficiency in using data analytics and AI tools to analyze health data, their ability to interpret and visualize data insights, and their capacity to make data-driven recommendations for exercise and health strategies. It also evaluates their communication skills through the written report, an essential skill in conveying insights to stakeholders in healthcare settings.

Behavioral Health and Technology: Strategies for Digital Adoption, Policy, and Impact
(DHXXXX, 500 level)
Course description: Anthropology of technology and the influence on health and well-being. Strategies for effective health technology adoption and digital tools for promoting physical activity, wellness, and adherence to health guidelines. Evidence-based policy making, regulatory frameworks, and government initiatives in digital health.
Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Understand the anthropology of technology and the associated influence on health and well-being
- Understand health technology adoption and implementation strategies
- Utilize digital technologies to promote:
    - adherence to physical activity and health guidelines
    - health and wellness among individuals and populations
- Assess health technology for the purpose of evidence-based policy-making
- Examine regulatory frameworks and government initiatives in digital health
- Analyze health policy and the impact on digital health
- Describe the socio-political impacts that digital healthcare technology can have on communities they serve
- Describe effective health behavior change management from multiple layers of influence
- Identify reactions to health-behavior change initiatives

Assessment Example: Oral Presentation, Team-Based

> **Description**: Students are divided into groups and tasked with researching and analyzing a specific digital health technology or intervention aimed at promoting physical activity, wellness, or adherence to health guidelines. Each group prepares an oral presentation to be delivered in class. In their presentations, students should cover the anthropology of the chosen technology, it's impact on health and well-being, the strategies used for adoption and implementation, and it's effectiveness of promoting health related behaviors. Additionally, they should address the socio-political impacts of the technology on the communities it serves and the relevant regulatory framework and government initiatives.

> **Assessment Criteria**: The oral presentations are assessed based on the depth of analysis, the clarity of communication, the quality of supporting evidence, and the ability to address questions from the audience. Students are evaluated on their understanding of the technology's influence on health, their ability to apply evidence-based policy considerations, and their insights on the socio-political implications of the technology.

> **Purpose**: The assessment aims to evaluate student's ability to critically analyze and articulate the impact of digital health technologies on health and well-being, as well as their proficiency in assessing these technologies from multiple perspectives, including anthropology, policy and socio-political impact. The oral presentation format also enhances their communication skills, which are crucial for presenting findings to diverse stakeholders in health settings.

Digital Health Solutions for Physical Activity and Health (DHXXXX, 500 level)
Course description: Digital tools from wearables, mobile apps, and telehealth platforms. Methods for assessing digital health interventions, scrutinize design for health solutions, cost effectiveness analysis, and health outcomes assessment.
Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Compare and identify appropriate digital technologies for health interventions including mobile applications and mHealth platforms, social media, wearable technologies, and telehealth or telemedicine
- Evaluate methodologies for evaluating health technologies and digital health interventions (e.g. physical activity, sleep)
- Apply cost-effectiveness analysis and health outcomes assessment
- Evaluate design considerations for mHealth solutions

Assessment Example: Infographic Creation

Description: Students are tasked with creating an infographic that visually presents information about a specific digital health technology or intervention related to physical activity and health. Each student selects a digital health solution (e.g., a mobile app, wearable device, or telehealth platform) and researches its features, effectiveness, and design considerations. They then design an infographic that includes key data points, graphics, and concise explanations to effectively convey the technology's value in promoting physical activity and health.

Assessment Criteria: The infographics are assessed based on their visual appeal, clarity of information presentation, accuracy of content, and relevance of the course objectives. Students are evaluated on their ability to compare and identify appropriate digital technologies, evaluate methodologies for health technology assessment, apply cost effectiveness analysis, and consider design factors in the context of mHealth solutions.

Purpose: This visual assessment aims to evaluate student skills of synthesizing complex information into a concise and visually engaging format, which is valuable for communicating digital health concepts to diverse audiences. It also assesses their ability to apply course concepts related to technology evaluation, cost effectiveness analysis, and design considerations within the context of mHealth solutions.

Health Data Management and Interoperability (DHXXXX, 500 level)

Course description: Strategies to mobilize health information across organizations, regions, and systems using electronic health records and health information exchange. Data sharing across health systems, data security, HIPAA regulations, privacy protection, risk management, and incident response. Ethical dimensions of health technology and data privacy in the digital age.

Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.

Grading method: A-F

Offered: F/SP/SU

Learning objectives:
- Explain the mobilization of health information electronically across organizations within a region, community, or system (e.g., electronic health records (EHR) and health information exchange (HIE))
- Understand key concepts of how data can be shared across health systems
- Describe the challenges faced in digital health regarding data security, HIPAA regulations, and Private Health Information (PHI), safe handling of information, and data protection
- Understand risk management and incident response in digital health
- Discuss the ethics of health technology and data privacy
- Design a risk management plan for health-data privacy
- Design a plan for appropriate safeguards to prevent common cybersecurity threats with digital health technologies
- Apply governance program principles to digital health initiatives to ensure their long-term success
- Demonstrate the skill to assess, organize, and explain the various software applications and digital assets used in a healthcare system to ensure efficient management and decision-making within the organization
- Understand data governance principles and healthcare regulations, ensuring ethical data management in health initiatives
- Understand effective interoperable systems and optimization of electronic medical records (EMR) for improved patient care and healthcare transformation

Assessment Example: Written Report, Case Study

Description: Students are required to prepare a comprehensive written report on a real-world case study related to health data management, interoperability, and data security. The case study involves a healthcare organization facing challenges in managing electronic health records (EHR), achieving interoperability, and ensuring data security. Students are tasked with analyzing the case, identifying key issues, and proposing solutions.

Assessment Criteria: The written reports are evaluated based on the depth of analysis, clarity of communication, and relevance of proposed solutions to the case study. Students are assessed on their ability to explain electronic health information mobilization, describe data sharing concepts, address data security and privacy challenges, and apply governance principles to ensure the success of digital health initiatives.

Purpose: This assessment aims to assess students understanding of health data management, interoperability principles, data security, and ethics in a practical context. It requires students to apply their knowledge to a real-world scenario, proposed solutions, and effectively communicate their findings in a written format. This aligns with the course objectives related to data governance, healthcare regulations, and optimizing EMR for improved patient care.

Prognostic Insights and Innovative Rehabilitation Techniques for Advancing Health (DHXXXX, 500 level)

Course description: Digital tools for rehabilitation to enhance accessibility, affordability, and scalability. Strategies, frameworks, and determinants for the successful implementation and evaluation of digital interventions, transforming the landscape of healthcare practices such as physical therapy.

Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.

Grading method: A-F

Offered: F/SP/SU

Learning objectives:
- Design interventions to enhance rehabilitation services by increasing accessibility, affordability, and scalability with digital tools
- Explain strategies, frameworks, outcomes, and determinants used to support and evaluate the implementation of digital interventions (e.g. physical therapy)

Assessment Example: Oral Presentation, Team-Based

Description: Students are divided into groups and tasked with preparing an oral presentation on an innovative digital tool or technology designed to enhance rehabilitation services. Each group selects a specific digital tool or technology, conducts in-depth research, and prepares a presentation that covers the following aspects:
- Overview and features of the chosen digital tools/technology.
- How it enhances accessibility, affordability, scalability, and rehabilitation services.
- Strategies and frameworks used in its implementation.
- Outcomes and determinants of success based on real world case studies or examples.

Assessment Criteria: The oral presentations are evaluated based on the quality of the content, clarity of presentation, depth of analysis, and the ability to effectively communicate the potential impact of the digital tool/technology on rehabilitation services.

Purpose: This assessment aims to gauge student's comprehension of innovative digital tools and technologies in the context of rehabilitation services. It assesses their ability to apply course concepts by selecting and analyzing a specific tool, evaluating its impact on rehabilitation, and presenting their findings orally.

Precision Medicine: Tailoring Digital Health Solutions (DHXXXX, 500 level)

Course description: Digital technology and personalized treatment plans for exercise and nutrition prescriptions, disease prevention, and wellness promotion. Digital tools for precision in prognosis and rehabilitation. Delivery of health and exercise guidelines with Motivational Interviewing (MI). Tailoring prescriptions and guidelines according to individual goals.

Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.

Grading method: A-F

Offered: F/SP/SU

Learning objectives:
- Solve problems using digital technology:
    - to design and prescribe treatment plans (e.g. exercise, nutrition)
    - to prevent disease and promote wellness
    - to tailor prescriptions and guidelines according to individual goals
    - for prognosis and rehabilitation
- Understand Exercise is Medicine (EIM) Global Health Initiatives including:
    - Assess current physical activity level of patients with digital technologies
    - Utilizing digital platforms/software to record and monitor physical activity levels
    - Design individual exercise prescriptions based on health history and physical activity levels
    - Utilizing digital tools to refer patients to physical activity resources (e.g. programs, places, professionals, or self-directed resources)
- Understand MI principles and adapt them to virtual health contexts.
- Develop active listening and empathetic communication skills for telehealth sessions.
- Assist clients or patients in setting goals and action plans through virtual platforms.
- Recognize and address resistance or ambivalence in telehealth interactions using MI techniques.
- Navigate ethical and cultural considerations in virtual MI practice and ensure compliance with regulations.

Assessment Example: Written Case Study Analysis

Description: Students are provided with a hypothetical case study involving an individual seeking personalized exercise and nutrition guidance through telehealth. The case study includes the patient's health history, current physical activity level data recorded by digital technologies, and personal goals. Students are tasked with:
- Analyzing the provided health data and digital technology records.
- Designing a personalized exercise and nutrition treatment plan based on the patient's health history, activity level, and goals.
- Applying motivational interviewing principles to a virtual telehealth interaction with the patient.
- Developing active listening and empathetic communication skills in a written script for the telehealth session.
- Setting patient-centered goals and action plans through the virtual platform.
- Identifying and addressing any resistance or ambivalence displayed by the patient using MI techniques.
- Discussing ethical and cultural considerations in the virtual MI practice and ensuring compliance with regulations.

Assessment Criteria: The written case study analysis is evaluated based on the accuracy and the appropriateness of the treatment plan, the application of MI principles, the quality of communication skills demonstrated, the effectiveness of goal setting, and the ethical and cultural considerations addressed. Students are addressed on their ability to apply course concepts in a real-world telehealth scenario.

Purpose: This assessment aims to measure student's ability to apply digital health technologies, precision medicine principles, and MI techniques in a telehealth context. It is assessing their problem-solving skills in tailoring treatment plans, their proficiency in virtual communication, and their understanding of ethical and cultural considerations.

Digital Disease Management and Public Health (DHXXXX, 500 level)
Course description: Digital technologies and disease management strategies for individuals and populations. Design of digital interventions with innovative tools such as wearables and implants to address public health challenges. Technology driven disease management and public health initiatives.
Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Utilize digital technologies to manage disease in individuals and populations
- Design a digital intervention to address public health issues (e.g. wearables or implants)
- Select and utilize appropriate communication mediums to relate to physical activity and health concepts and synthesize knowledge
- Describe the methods to communicate quickly and effectively during health-related crises
- Describe methods to communicate effectively to all levels of organizational hierarchy with health promoting initiatives
- Describe the impacts of culture, perception, ethics, and other factors on effective health-initiative communication

Assessment Example: Oral Presentation, Team-Based

> **Description**: Students are divided into groups and tasked with designing a digital intervention aimed at addressing a specific public health issue using innovative tools such as wearables, implants, or mobile applications. Each group is required to:
> - Identify a prevalent public health problem (e.g., obesity, smoking cessation, mental health) and the target population.
> - Develop a detailed proposal for a digital intervention using innovative technologies.
> - Describe the features and functionalities of the digital intervention.
> - Explain how the intervention will engage in benefit individuals and populations.
> - Present their proposal in an oral presentation format to the class, faculty, and possibly industry experts.
>
> **Assessment Criteria**: The oral presentations are evaluated based on the clarity and comprehensiveness of the digital intervention proposal, the creativity and innovation in addressing the public health issue, the effectiveness of communication during the presentation, and the ability to answer questions from the audience. Students are also assessed on their understanding of communication methods during health-related crises and the impact of culture, perception, ethics, and other factors on health initiative communication.
>
> **Purpose**: This assessment aims to measure student's ability to apply digital health technologies to address public health challenges. It evaluates their creativity in designing interventions and their proficiency in presenting and communicating their ideas effectively.

Leading Inter-Professional Teams in Health Initiatives (DHXXXX, 500 level)
Course description: Core principles of leadership and their application in multidisciplinary health settings. Organizational outcomes and metrics to drive success in health initiatives, dynamics of team cohesion, and effective collaboration. Conflict resolution skills to navigate interprofessional healthcare teams.
Pre-requisites: Admission to DH (or related online MS) program; credit or concurrent enrollment in Foundations of DH, credit or concurrent enrollment in Research Methods and Ethics of Health Technologies, or permission of Program Director.
Grading method: A-F
Offered: F/SP/SU
Learning objectives:
- Explain and demonstrate leadership principles
- Develop organizational outcomes and metrics in health initiatives
- Map out how assets work inter-connectedly to achieve the organization's strategic goals
- Explain principals of team dynamics and cohesion
- Explain complex collaborations within an organization
- Compare characteristics of a high and low-performing team
- Explain the lifecycle of a project
- Demonstrate conflict resolution skills
- Summarize relationship management in healthcare, including why it is an essential skill and how best to implement these elements in different environments in healthcare
- Describe methods of engaging multiple stakeholders in health initiatives

Assessment Example: Written Report, Case Study

> **Description:** Students are presented with a hypothetical complex health initiative scenario that involves the need for interprofessional collaboration within a healthcare organization. Students must:
> 1. Analyze the Scenario: Understand the intricacies and challenges presented in the scenario, including the need for interprofessional teamwork.
> 2. Develop an Organizational Strategy: Develop a comprehensive organizational strategy that outlines the principles of leadership, organizational outcomes, and metrics required to drive success in the health initiative.
> 3. Team Dynamics and Cohesion: Explain the principles of team dynamics and cohesion and apply them to the scenario by describing how they would ensure effective teamwork.
> 4. Conflict Resolution Plan: Develop a conflict resolution plan to address potential conflicts with the interprofessional team, including strategies for resolution and prevention.
> 5. Stakeholder Engagement: Describe methods for engaging multiple stakeholders in the health initiative, considering their rolls and interest.
>
> **Assessment Criteria**: The written reports are evaluated based on the depth of analysis of the scenario, the clarity and feasibility of the organizational strategy, the effectiveness of the conflict resolution plan, the understanding of team dynamics and cohesion, and the practicality of stakeholder engagement methods. Students are also assessed on their ability to apply leadership principles to the scenario.
>
> **Purpose**: This assessment aims to measure student's ability to apply leadership principles, develop effective organizational strategies, understand and address team dynamics and conflicts, and engage stakeholders in complex health initiatives.

Capstone Project in Digital Health (DHXXXX, 500 level)
Course description: The Digital Health Capstone Project shows substantial evidence of individual accomplishment and serves as a culminating experience for students in the Master of Digital Health program. It provides an opportunity for students to demonstrate their understanding of digital health concepts, apply their acquired skills, and integrate their knowledge into a substantial project. The project can be an applied internship in collaboration with industry partners or healthcare organization, a literature review and analysis, completed either individually or in groups, and will involve documentation and a presentation to faculty and students.
Pre-requisites: Eighteen hours of DH course credits completed or permission of Program Director.
Credits: 1-3
Grading method: S-F
Offered: F/SP/SU

Option 1: Independent Applied Project

For students who prefer an individual project, they will select a specific digital health challenge or opportunity and develop an innovative solution. This could involve designing and prototyping a new mobile health app, developing a digital health tool or platform, or creating a data analytics framework for a healthcare organization. The project should involve significant research, problem solving, and practical implementation, emphasizing the application of digital health principles and methodologies.

Option 2: Group Applied Project

Students who choose the group project option will form teams to collaboratively address a complex digital health problem. This could involve designing and implementing a telemedicine program for a specific population, developing a comprehensive digital health strategy for a healthcare organization, or creating a digital health intervention for a community health initiative. The group project emphasizes teamwork, effective communication, and the ability to work in interdisciplinary settings to solve real-world challenges.

Option 3: Literature Review and Analysis

For students interested in researching analysis, they can undertake a comprehensive literature review on a specific digital health topic of interest. This option requires in-depth exploration of existing literature, critically analyzing the current state of knowledge, identifying research gaps, and proposing potential areas for further investigation. The literature review should demonstrate the student's ability to synthesize information, evaluate evidence, and draw meaningful conclusions in the context of digital health. In addition, students will design and conduct a survey-based pilot study to empirically investigate and validate the gaps and insights identified in their literature review.

Option 4: Industry Partnership Project

In collaboration with industry partners or healthcare organizations, students can engage in in applied project that addresses a real-world digital health challenge. This option allows student to work closely with professionals from industry, applying their skills and knowledge to tackle practical problems. The project could involve developing a digital health solution, conducting a feasibility study for a new technology implementation, or evaluating the impact of an existing digital health initiative. It provides students with valuable hands-on experience and an opportunity to establish connections with the digital health industry.

Capstone Project Presentation and Documentation

Regardless of the chosen project option, all students are required to deliver a project presentation to faculty, peers, and relevant stakeholders. The presentation should highlight the project objectives, methodology, findings, and the implications of the work. Additionally, students will prepare comprehensive project documentation, which includes a final report outlining the project scope, background, methodology, results, and recommendations. The documentation should reflect the student's ability to articulate their project in a clear, organized, and professional manner.

By offering these project options, the digital health capstone allows students to tailor their experience to their individual interests and career goals while integrating the knowledge and skills gained throughout the program. It encourages innovation, critical thinking, and collaboration, providing a meaningful contribution to the field of digital health.

Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1. ☒ New Program   □ Name Change   □ Discontinuation   □ Concurrent Degree for:

2. □ Undergraduate Major ☒ Graduate Major   □ Undergraduate Minor   □ Graduate Minor

   □ Undergraduate Certificate   □ Graduate Certificate   □ Other: _____

3. Name of Proposed Change: ___Master of Digital Health (MDH)_____

4. Name of Contact Person: ___Kira Werstein_____ e-mail address: ___werstein@iastate.edu___

5. Primary College: ___Human Sciences_____ Secondary College: _____

6. Involved Department(s): ____Kinesiology_____   _____

   _____   _____

Voting record for this curricular action:

Voting Body	Votes			Date of Vote
	For	Against	Abstain	
Dept. or Program Committee				
Kinesiology Department: Vote on Program	26	0	0	8-18-23
KIN Curriculum Committee: Vote on Program	4	0	0	9-6-23
KIN Curriculum Committee: Vote on Curriculum	4	0	0	9-6-23
Kinesiology Department: Vote on Curriculum	22	0	0	9-20-23
College Curriculum Committee	6	0	0	9-21-23
College Approval Vote	64	9	0	10-9-23
Graduate Dean	1	0	0	10-26-23
Graduate Council	6	0	0	10-26-23
Faculty Senate Curriculum Committee	6	0	0	11-09-23
Faculty Senate Academic Affairs Council	8	0	0	11-16-23
Faculty Senate				