

AI in Medicine Syllabus

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Course Description

The Artificial Intelligence (AI) in Medicine certificate will equip health care professionals with a conceptual understanding of AI and its applications through medical case studies using machine learning models. This course will help prepare physicians, physician assistants, nurse practitioners and veterinarians to lead in the era of digital medicine.

Course Goals

Students will possess the knowledge required to understand AI in healthcare settings.

What You'll Learn

- Confidently read literature related to artificial intelligence in medicine.
- Understand how data-driven decisions are made and assessed.
- Identify and define different types of artificial intelligence tools and techniques used in medicine.
- Actively participate in the selection, purchase and deployment of AI based medical software.

Module Topics

- **Module 1 – Data and Decisions**
- **Module 2 – Concepts of Machine Learning**
- **Module 3 – Deep Learning**
- **Module 4 – Extending Deep Learning**
- **Module 5 – Deploying AI in Practice**
- **Module 6 – Real-World Applications of AI in Medicine**

Course Overview

All course materials will be accessed via the internet. Course modules will be a combination of video lectures and quizzes. Learners will work as an individual at their own pace to explore the concepts in this course.

Learning Activities

- **Video Lectures** – Instructors will present the core learning materials via high quality videos.
- **Quizzes** – Learners will take a quiz for each module. The quiz is located at the end of each module.

Course Policy

- **Get Your Certificate**
A Certificate of Completion is available for this course. Once the certificate is granted, you will be able to see your certificate on the course progress page.
- **Obtain Continuing Education Credit**
This course has been planned and implemented in conjunction with the Carle health system and the Carle Illinois College of Medicine. Carle health system is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC) to provide continuing education credits. Veterinary Continuing Education credit is also available through the University of Illinois College of Veterinary Medicine, an approved CE provider by the State of Illinois.

Resources and Support

- **Technology Service Help Desk Support**
Please contact the i-Learning center at ilearningvetmed@illinois.edu for technical support.
- **Course Discussion**
Learners can help each other via the discussion page in each module.
- **Virtual Office Hours**
Virtual office hours are available on a weekly basis via Zoom. Please see the course page for details: <https://ilearning.vetmed.illinois.edu/courses/course-v1:IllinoisBioengineering+AI01+2021Spring/about>

