ITMM 587 SYLLABUS

ITMM 587 Product Management

ILLINOIS TECH

Hours: 3 credit hours / 45 contact hours

Instructor: Chuck Beck

Textbook, title, author, and year:

None. All assigned reading will come from online sources or materials shared by the instructor.

Specific course information:

- a. Catalog description: This course explores the Product Management role in information technology and common processes, tools, and methods employed. Students will learn to identify business opportunities and market strategies as well as management of development teams in product developments that cross business and technology boundaries.
- b. Prerequisites: None.

Specific goals for the course

a. **Course Outcomes:** The objective of the course is to expose students to the many facets of product management and to explore how a product backlog can be defined, built, and delivered. We will explore common tasks, challenges, and inter-actions that product managers face on a recur-ring basis. Each successful student will be able to demonstrate foundational knowledge and application of the core concepts of product management.

b. Course Student Outcomes:

At the conclusion of this course, students will be able to:

- Recall and explain the role of a product manager
- Engage stakeholders to identify business opportunities that product management can help solve
- Engage users to identify value adds and efficiency gains that product management can help solve
- Perform competitive analysis and research market conditions related to a software product
- Transform ideas into product designs and describe how to work with UI/UX resources
- Recall and describe common methodologies used in product management
- Refine a product backlog and prioritize requests including how to obtain level of effort estimates
- Explain what a minimum viable product (MVP) is and negotiate scope
- Recall and explain the differences between epics, features, and user stories
- Create clearly written, non-ambiguous user stories that deliver business value

- Formulate acceptance criteria and the definition of done for a user story / feature
- Define KPI's and use metrics to analyze product performance
- Explain how to determine if roadmap progress is on track and how to estimate delivery dates
- Lead cross-functional teams to deliver value through product development and enhancements
- Recall and describe the role of product management after a product is released
- Recall and explain key differences between physical vs. software product management challenges
- Identify and discuss common tools used in product management
- Recall certifications and training for product management and describe how product managers continue to advance their knowledge and skill sets

Topics to be covered

- a. Discovery
- b. Market Research & Analysis
- c. Design
- d. Breaking Down the Work
- e. Testing & Validation
- f. Methodologies
- g. Backlogs & Prioritization
- h. Roadmap & MVP
- i. KPI's and Metrics
- j. Leading Cross Functional Teams
- **k.** Support / Training
- 1. Warranty / Documentation
- m. Digital vs. Physical Products & Tools of the Trade
- n. Certification, Training, and Beyond