

Course Syllabus

Informatics Project Management – B505

Department of BioHealth Informatics Indiana University School of Informatics and Computing, Indianapolis

(3 credit hours)

Prerequisites: None

COURSE

DESCRIPTION

This Competency Driven Curriculum uses globally recognized project management concepts and capabilities so students can learn how these skills can be useful in a team environment. The student will use Project Management processes, tools and methodologies to simulate a real-life project. The students will use this class project to collaborate and provide a foundation for the members of a successful team. Through lecture, reading, discussion, exercises and projects, students will become more proficient with project management terminology, techniques and technologies. Students will apply industry-standard project management competencies in a framework of productive team dynamics, consumer frame of reference, and organizational change.

Course Resources:

Required Book: *Schwalbe, K. (2019), Information Technology Project Management (9th Ed.)* ISBN 9781337101356. Available at the IUPUI Barnes and Noble Bookstore and Amazon.com Also available as an eText on Engage.

Reference Book:

Guide to the Project Management Body of Knowledge (PMBOK), 6th edition. Project Management Institute Published September 22, 2017, **ISBN-10:** 9781628251845, **ISBN-13:** 978- 1628251845 PMI's flagship publication has been updated to reflect the latest good practices in project management. New to the Sixth Edition, each knowledge area will contain a section entitled Approaches for Agile, Iterative and Adaptive Environments, describing how these practices integrate in project settings. It will also contain more emphasis on strategic and business knowledge—including discussion of project management business documents—and information on the PMI Talent Triangle™ and the essential skills for success in today's market. Additional readings as suggested by the instructor.

PM Software: Options will be discussed in class. You do not need to purchase software for this class.

Competency Drive Curriculum Objectives:

Course Objectives	AMIA functional domains	Proposed competency driven objectives	Miller's Pyramid(map)	Class activities	Assessment
-------------------	-------------------------	---------------------------------------	------------------------	------------------	------------

1. Apply project management methods to overcome the complexities of informatics projects	F2	Student will be able to apply project management methods in the different context of health informatics projects.	KNOW S HOW	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
2. Plan informatics projects, setting their scope and assigning team members appropriately to roles.	F10	Students will be able to make plan for health informatics projects according to their scope and assign roles to team members appropriately	DOES	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
3. Apply to informatics projects time management concepts, such as network diagrams, CPM, and PERT.	F5	students will be able to recognize and use informatics time management concepts in informatics projects.	KNOW S HOW	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
4. Apply cost management and budgeting principles.	F2	students will be able to do cost management in compliance with budget principles.	KNOW S HOW	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
5. Manage unanticipated changes in informatics projects.	F8	Students will be able to manage unplanned changes in informatics projects.	KNOW S HOW	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
6. Perform risk analysis by means of quantitative and qualitative methods.	F2	Students will be able to conduct risk analysis using	DOES	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures

		quantitative and qualitative methods in informatics projects.			
7. Employ both “hard” and “soft” skills in leading a project team.	F10	Students will learn to lead a project team using both "hard" and "soft" skills.	DOES	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
8. Use project management software effectively.	F2	students will be able to use project management software in informatics projects	DOES	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
9. Apply communication, negotiation, and group decision-making abilities in team projects.	F9	Students will demonstrate ability to communicate and negotiate and make decisions in team project	DOES	Readings, Project Discussion, video lectures	Readings, Project Discussion, video lectures
10. Demonstrate ethical and professional behavior in response to ethically challenging situations.	F8	Students will demonstrate ethicalness and professionalism when coping with ethic issues in informatics projects	KNOW S H O W		Readings, Project Discussion, video lectures

Project Management Competencies:

1. Project Foundations
2. Project Integration Management
3. Project Scope Management
4. Project Time Management
5. Project Cost Management
6. Project Quality Management
7. Project Human Resource Management
8. Project Communications and Stakeholder Management
9. Project Risk Management
10. Project Procurement Management

Expectations, Guidelines, And Policies Attendance:

Class attendance is required for classroom-based courses. It entails being present and attentive for the entire class period. Attendance shall be taken in every class. If you do not sign the attendance sheet while in class, you shall be marked absent. Signing the attendance sheet for another student is prohibited. The instructor is required to submit to the Registrar a record of student attendance, and action shall be taken if the record conveys a trend of absenteeism. Illness or a death in the immediate family is usually the only acceptable excuse for absence from class. Absences must be explained to the satisfaction of the instructor, who will decide whether omitted work may be made up. To protect your privacy, doctor's excuses should exclude the nature of the condition and focus instead on how the condition affects your coursework.

Missing class reduces your grade through the following grade reduction policy: You receive credit for each entire class that you attend. You do not receive credit for classes that you do not attend or that you partially attend. Five absences result in an F in the course. Missing class could reduce your grade and eliminate opportunities for class participation.

Incomplete:

The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. <http://registrar.iupui.edu/incomp.html>

Deliverables:

You are responsible for completing each deliverable (assignments, quizzes) by its deadline and submitting it by the specified method. Deadlines are outlined in the syllabus or in supplementary documents accessible through Canvas. Should you miss a class, you are still responsible for completing the deliverable and for finding out what was covered in class, including any new or modified deliverable. In fairness to the instructor and students who completed their work on time, a grade on a deliverable shall be reduced 25%, if it is submitted late and a further 25% for each 24-hour period it is submitted after the deadline. Assignments are not accepted after the third day that they are due.

Grading Information:
Learning Activities and Percentage of Student's Final Grade

Learning Activities	Percentage of Grade
Quizzes	30%
Project Deliverables	40%
Project Team Contributions and Participation	10%
Discussions	10%
Canvas Utilization and Class Engagement	10%

*Contribute: Responsible and knowledgeable contribution toward a quality product Examples of a Course project:

- Design a project management plan to implement a health care solution that involves at least 2 departments.
- Design a project management plan to meet a new federal guideline for patient privacy.

***Note:** the course project will require a few synchronous meetings with peers.

Principles of Graduate and Professional Learning (PGPL)

Upon completion of the course, the students will be:

*Demonstrating mastery of the knowledge and skills related to core competencies of course as expected for the degree and for professionalism and success in the field

*Thinking critically, applying good judgment in professional and personal situations when using health information technology

*Communicating effectively to others in the field and to the general public on any topics explored in the course

*Behaving in an ethical way both professionally and personally.

Evaluation Forms: Students should review all grading forms that will be used by the instructor to grade projects, presentations, papers, and other assignments. If students want to see their grades at any time during the semester, they should contact the instructor by phone or email.

Score: Criteria to Evaluate Homework and the Team Project.

Student is scored on a scale of 1-4 (see table below) on each of the following attributes:

- References: the degree to which required reading are included and the way references are used in the student's postings
- Level of cognition: the degree to which the student's postings represent basic knowledge recall, comprehension,

application or higher levels of cognition such as analysis, evaluation or synthesis from the readings/discussion.

- **Answer development and logic:** the degree to which the student’s postings logically address and develop the questions posed in the assignment.
- **Respect and level of peer interaction:** the degree to which the student’s postings reflect respect for others and the extent to which the student extends or generates higher levels of cognition among their peers

The average of the four attribute scores is considered the final score for each posting assignment. If the student posts beyond the due date, 25% is deducted from the student’s final score, for each calendar day the student is late unless the student contacts the instructor prior to or within 24 hours of the due date and receives a waiver of the late penalty.

4	<ul style="list-style-type: none"> • References demonstrate completion of all reading assignments and postings demonstrate student is applying referenced information; <u>student adds additional referenced information and/or resources.</u> • Level of cognition: Demonstrates <u>analysis, synthesis and/or evaluation levels of cognition</u> by analyzing relationships or principles, creating new ideas or recognizing patterns, and/or being able to present and defend opinions by making judgments about knowledge gained with appropriate and referenced defense of position. • Answer development and logic: Postings are well-developed <u>and logically reasoned.</u> • Respect and level of peer interaction: Respectfully <u>encourages analytical and/or synthesis, and/or evaluative type discussions</u> among peers.
3	<ul style="list-style-type: none"> • References demonstrate completion of all reading assignments and postings demonstrate student is <u>applying</u> referenced information. • Level of cognition: Demonstrates <u>applied level of cognition</u> by applying acquired knowledge, facts, techniques, or rules in a different way to solve practice, research, or educational problems. • Answer development and logic: Postings <u>are well-developed</u>; logic may not be clear. • Respect and level of peer interaction: Respectfully <u>encourages applied level of discussions</u> among peers.
2	<ul style="list-style-type: none"> • References demonstrate completion of <u>all</u> reading assignments and postings demonstrate student is primarily summarizing referenced information. • Level of cognition: Demonstrates <u>comprehension level of cognition</u> by primarily organizing, comparing/contrasting, translating, and/or interpreting course concepts and main ideas. • Answer development and logic: Postings <u>are not fully developed</u>; logic may not be clear. • Respect and level of peer interaction: Respectfully <u>encourages knowledge recall and/or comprehension level of discussions</u> among peers
1	<ul style="list-style-type: none"> • References demonstrate <u>only partial completion</u> of reading assignments and postings demonstrate student is primarily summarizing referenced information. • Level of cognition: Demonstrates <u>basic knowledge level of cognition</u> by primarily summarizing and/or restating course concepts and main ideas. • Answer development and logic: Postings <u>reflect minimal effort</u> in answer development or logic. • Respect and level of peer interaction: Not <u>respectful</u> of others and/or feedback to peers is <u>minimal and primarily for the purpose of social interaction and/or acknowledgement of peer posting ideas.</u>
0	<ul style="list-style-type: none"> • Assignment <u>not completed</u>

Grading Scale		
A+	97 – 100	Outstanding achievement, given at the instructor’s discretion
A	93 – 100	Excellent achievement
A–	90 – 092.99	Very good work
B+	87 – 089.99	Good work
B	83 – 086.99	Marginal work
B–	80 – 082.99	Very marginal work
C+	77 – 079.99	Unacceptable work (Core course must be repeated)
C	73 – 076.99	Unacceptable work (Core course must be repeated)
C–	70 – 072.99	Unacceptable work (Elective or core course must be repeated)
D+	67 – 069.99	Unacceptable work (Elective or core course must be repeated)
D	63 – 066.99	Unacceptable work (Elective or core course must be repeated)
D–	60 – 062.99	Unacceptable work (Elective or core course must be repeated)
F	Below 60	Unacceptable work (Elective or core course must be repeated)

MISSION STATEMENT - The Mission of IUPUI is to provide for its constituents’ excellence in • Teaching and Learning; • Research, Scholarship, and Creative Activity; and • Civic Engagement. With each of these core activities characterized by • Collaboration within and across disciplines and with the community; • A commitment to ensuring diversity; and • Pursuit of best practices. IUPUI’s mission is derived from and aligned with the principal components—Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University’s Strategic Directions Charter.

STATEMENT OF VALUES - IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana’s capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community, both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well

as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.

CODE OF CONDUCT - All students should aspire to the highest standards of academic integrity. Using another student’s work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program. All students are responsible for reading, understanding, and applying the Code of Student Rights, Responsibilities and Conduct and in particular the section on academic misconduct listed below. Refer to The *Code > Responsibilities > Academic Misconduct* at <http://www.indiana.edu/~code/> . All students must also successfully complete the Indiana University Department of Education “How to Recognize Plagiarism” Tutorial and Test. <https://www.indiana.edu/~istd> .. You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else’s words. To detect plagiarism, instructors apply a range of methods, including Turnitin.com. <http://www.ulib.iupui.edu/libinfo/turnitin> .

Academic Misconduct:

1. **Cheating:** Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment. a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices. b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advanced authorization from the instructor to whom the work is being submitted. c. A student must not use materials from a commercial term paper company, files of papers prepared by other persons, or submit documents found on the Internet. d. A student must not collaborate with other persons on a project and submit a copy of a written report that

is represented explicitly or implicitly as the student's individual work. e. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork. f. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images. g. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom the work is being submitted. h. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

2. Fabrication: A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.

3. Plagiarism: Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered "common knowledge" may differ from course to course. a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment. b. A student must give credit to the originality of others and acknowledge indebtedness whenever: 1. directly quoting another person's actual words, whether oral or written; 2. using another person's ideas, opinions, or theories; 3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written; 4. borrowing facts, statistics, or illustrative material; or 5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment

4. Interference: A student must not steal, change, destroy, or impede another student's work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student's grade or the evaluation of academic performance. Impeding another student's work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

5. Violation of Course Rules: A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.

6. Facilitating Academic Dishonesty: A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

OTHER POLICIES

Right to revise: The instructor reserves the right to make changes to this syllabus as necessary and, in such an event, will notify students of the changes immediately.

IUPUI course policies: A number of campus policies governing IUPUI courses may be found at the following link: http://registrar.iupui.edu/course_policies.html .

Classroom civility: To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones engagement in private conversations and other unrelated activities. Texting, surfing the Internet, and posting to Facebook or Twitter during class are not permitted.

IUPUI nurtures and promotes "a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued" (IUPUI Strategic Initiative)

IUPUI prohibits "discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or [veteran] status" (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a warning and, if the offense continues, possible disciplinary action.

Bringing children to class: To ensure an effective learning environment, children are not permitted to attend class with their parents, guardians, or childcare providers.

Disabilities Policy: In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of accommodations needed for the course. Students requiring accommodations because of a disability must register with

Adaptive Educational Services (AES) and complete the appropriate AES- issued before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: aes@iupui.edu, Tel. 317 274-3241). Visit <http://aes.iupui.edu> for more information.

Administrative Withdrawal: A basic requirement of this course is that students participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, it is the student's responsibility to inform the instructor. If a student misses more than half of the required activities within the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and a student who has been administratively withdrawn from a course is ineligible for a tuition refund. Contact the instructor with questions concerning administrative withdrawal.

Course Evaluation Policy: Course evaluations provide vital information for improving the quality of courses and programs. Students are required to complete one course and instructor evaluation for each section in which they are enrolled at the School of Informatics and Computing. This requirement has three exceptions: (a) The student has withdrawn from the course; (b) only one student is enrolled in the section

(in which case anonymity is impossible); and (c) the section is a laboratory that must be taken with a course having a different section number. Course evaluations are completed at <https://soic.iupui.edu/app/course-eval/> Course evaluations are open from the eleventh week. Course evaluations are anonymous, which means that no one can view the name of the student completing the evaluation. In addition, no one can view the evaluation itself until after the instructor has submitted the final grades for the course. In small sections, demographic information should be left blank, if it could be used to identify the student. A course evaluation must close before the grade for that course can be released. To ensure students have had ample opportunity to complete the evaluation, an uncompleted course evaluation could delay the release of the grade for up to a week.

Communication: The instructor will respond to emails within 48 hours, excluding weekends and holidays, and announce periods of extended absence in advance. The instructor will accept appointments for telephone, or teleconferenced meetings.

Email: Indiana University uses your IU email account as an official means of communication, and students should check it daily for pertinent information. Although you may have your IU email forwarded to an outside email account, please email faculty and staff from your IU email account.

Emergency Preparedness: Safety on campus is everyone's responsibility. Know what to do in an emergency so that you can protect yourself and others. For specific information, visit the emergency management website. <http://protect.iu.edu/emergency>