UNESCO-UNITWIN OCW/OER INITIATIVE
HANDONG GLOBAL UNIVERSITY

[A-3]COURSE SYLLABUS

Professor's Information	
Name	Tuyatsetseg Badarch , PhD, Associate professor
Affiliated University	Mongolian National University

Course Information			
Course Name	Information technology project management	Number of Lectures	12
Course Date	2021/10/10 ~ 2022/01/10	Course Language	English
Keyword	Project management, management, Information technology		

Course Description (100 ~200 words)	Learning to apply management techniques to develop simple IT projects. The life cycle of technology development projects? Students will learn the fit of the model as well as project planning tasks, assignments, estimating effort, time, and profit knowledge the required resources. Those will include, for instance, - risks of information technology projects, and legal issues be able to recognize and classify. - Organizing project staff and have knowledge of project leader/team member/ personnel management - Ability to identify, classify, and group legal frameworks, risks, and relationships - Take the project leader and the project further gain knowledge and skills to travel
Course Goals and Objectives (Approximately 100 words)	Students will learn about information technology project management, project sizes, and cost evaluation, project planning, risk, resources, process, performance, reporting, configuration, and team management technologies and methodologies. Students will learn costs and time as well as how to calculate and manage risk, project planning and project evaluation, project monitoring and management, learn about planning and information technology project quality standards
Textbook	**(The format : Title, Author/Editor, Publisher, Year of Publication)** 1. Information Technology Project Management, Kathy Schwalbe, Revised 7th Edition, ISBN-13: 978-1285847092, ISBN-10: 1285847091, January 1, 2013 2. Internet search, contemporary resources 3. Applied Software Project Management, Andrew Stellman published by OReily, 2010. 4. Dia manual pdf for ULM or project management
References	1. The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right by Tom Kendrick 2. Information Technology Project Management, 7th Edition, Kathy Schwalbe , MC Press; 2nd edition , Sep 21, 2012 3. Fundamentals of Technology Project Management 2nd Edition by Colleen Garton, Erika McCulloch 4. Internet resources

Course Requirements and Grades	Activity 30% Article reading, extra as a bonus, 10% (Students will be asked to read up to 5 articles on IT project management topics written in the last five years. Please send 5 short notes (each has a minimum 250 words you read.) Final exam 70% (Students are expected to answer questions and actively participate in the lectures, readings and reports. Final exam type: Submission of questions with answers)

Course Calendar	
Week	Main Content
Week 1	**Project management fundamentals** and general strategy for successful project in IT and programing projects
Week 2	**Project planning techniques**, Information technology project planning its flow charts Case studies in Software project flowcharts for planning, resources, risks
Week 3	**Project estimation techniques**, A work breakdown structure (WBS), Wideband Delphi, PROBE, or Proxy Based Estimating , Constructive ost model (COCOMA), Planning game model, An effort estimate for each task A list of assumptions that were necessary for making the estimate
Week 4	**Project schedule**, Effort vs. Duration Slack and Overhead, Allocate resources ,Identify dependencies, Brook's law, Gantt chart, Milestone approaches, Critical path, Buffer, Baseline, Variance, Earned value management, Budgeted cost for IT projects
Week 5	**Project review** techniques, Inspection techniques, Desckcheck techniques, Walkthroughs, Pair work techniques, Real cases of projects of Information technology and software quality engineering
Week 6	**Project requirements**, analysis, functional and non -functional requirements, specifications, change control techniques, In terms of ISO-9003 standards, quality assessment, and project products qualities Real cases of projects of Information technology and software quality engineering
Week 7	**Project activity modeling methods** (Gantt chart, Pert, CPM), case of DIA program, its UML part Factors influencing project work, control techniques
Week 8	**Project design**, IT Project phases, its design, S.M.A.R.T methodology, project phases, project automation techniques, project integration approach, project success hints
Week 9	**Project risk management**, risk characteristics, and analysis, qualitative and quantitative analysis, case studies in IT projects
Week 10	**Project quality assurance**, standards, ISO 9000, CMMI model, ISO15504, Software project cases : version control, refactoring, unit testing methodology, testing plan, test cases, test automation, postmortem report
Week 11	**Project change management**, types of change management, case studies, tools of change management, methodologies, Prosci Methodology's , Impact of use of methodology, reasons of why change fails and change success, critical elements of change success, management and leadership
Week 12	**Process Improvement** , Managing an Outsourced Project, Software Process Improvement, contemporary Frameworks and Methodologies (CMM, ISO 9000 and Six Sigma, Rational Unified Process and Extreme Programming), fixing bugs and more on improvement techniques, examples
	Final exam The final exam (max 70 percent) ***Reading articles report***

	Students maybe be asked to select up to 5 articles on IT project management topics written in the last five years. Please send a short notes (within 250 words) on each article for extra score as a bonus