

NEW GRADUATE DEGREE OR GRADUATE CERTIFICATE FORM D

UNIT PREPARES IN QUADRUPLICATE
Route as indicated below under approvals. Return to the
Registrar's Office once all signatures have been obtained.

Date: 8/15/18

Dr. Shawn Berman, Dr. Steve Walsh
(Name of individual initiating Graduate Degree or Graduate Certificate)

Dr. Berman - Associate Dean, Dr. Walsh - Distinguished Professor
(Title, position, telephone number)

sberman@unm.edu, walsh@unm.edu
(Email address)

Anderson School of Management/Graduate Programs
(Department/Division/Program)

*Allow up to one year for the process to be
completed for a certificate, and 18 months
for a degree.

Note: Proposals for new graduate degrees or graduate certificates need to follow an approved format. Please call the
Office of Graduate Studies and ask for an outline. Revisions of graduate degrees and some new certificates also may need
state approval, depending on the extent of changes proposed. Please consult the Office of the Provost for advice prior to
initiating this form.

Attach the following required documents:

1. Executive Summary.
2. Program Proposal (in the approved format).
3. Catalog Description (to include program curriculum).
4. Graduate Program Projected Costs (only for new degrees).
5. Library Impact Statement.

Does this new degree affect any existing program? Yes ☐ No ☒ If yes, attach statement.

Proposed date to admit new students: Term Spring Year 2020

Required Signatures:

Department Chair		Date 8/30/18
College Curricula Committee		Date 8/30/2018
College or School Dean		Date 8/30/18
Dean of Library Services		Date 9/12/18
Office of the Registrar—Catalog		Date 1/9/19
FS Graduate Committee		Date 11/07/19
Dean of Graduate Studies		Date 11/07/19
FS Curricula Committee		Date 12/24/19
Office of the Provost		Date 8/13/20
Faculty Senate		Date
Board of Regents		Date

Additional Approvals for Degrees:

Board of Regents	Date
Council of Graduate Deans	Date
Academic Council of Higher Education	Date
Higher Education Department	Date
State Board of Finance	Date

Entered Banner

Entered Catalog

For Registrar's Office ONLY:

Copies Mailed

Form B New Course Request Form

- Used to request new undergraduate and graduate courses. Courses that have been offered three times as a special topics course should be established as a new course for the fourth offering.

Name of Initiator: Nick V. Flor Email: nickflor@unm.edu Date: 11/9/2018

Phone Number: 505-277-6471 Initiator's Title: Associate Professor

Associated Forms Exist: No

Faculty Contact: Nick V. Flor Administrative Contact: Robin Love

Department: MIDS, Anderson School of Management

Admin Email: rlove01@unm.edu Admin Phone: 277-8438

1) Course Subject Code: MGMT

2) Course Number: 510

3) Credit hours, select: Fixed

Number of credit hours assigned if fixed: 3

Range of credit hours, low to high if variable:

Table below reflects how the online form is structured. Credit hours must be completed both in credit hours and lecture hours rows. Lab hours can be used but not as common for Anderson classes.

		Credit Hours		
	Fixed	Variable		
	Credit	Low	Or/To	High
Credit hours	3			
Lecture Hours	3			
Lab Hours	0			

4) Long Course Title: Risk Analysis for Projects and Programs

5) Short Course Title (30 characters max): Project Risk Management

6) College: ASM (Anderson School of Management)

7) Department: MGMT (Management)

8) Subject code: **MGMT (Management)** Course number: **510**

If the course will be crosslisted, indicate the courses:

Subject Code: Course number:

9) Give a full, precise and complete listing of the proposed new course, following the current format used in the UNM catalog, to be **no longer than 35 words**. Listing must include course number, title, credit, description, pre and/or corequisites, and restrictions:

510. Risk Analysis for Projects and Programs (3). The analysis and management of uncertain events or conditions in projects and programs.

10) Course Level : **GR**

If **Both** UG/GR is selected, complete the Justification for Graduate Credit Field.

11) Schedule Types (may be more than one)

Action: Adding schedule type

Schedule: Please circle: (may be more than one type, generally "Lecture" for Anderson classes)

Clinical clerkship	Co-op	Correspondence	Independent Study
Laboratory	<u>Lecture</u>	Lecture/Laboratory	Lecture/Practice Exp
Practice/Experience	Professional paper		Recitation
Seminar	Studio	Thesis	Dissertation
Topics	Workshop	Writing	

12) Co-requisites to this course: **None**

13) Restrictions: **None**

14) Pre-requisites for course: **None**

15) Catalog checked, and no duplication found. This course focuses on business and organizational risk on project and program objectives.

16) Is the course an elective or a required course for degree program? **Elective**

17) Technical Course (branches only): Not applicable.

18) Has this course been offered as a topics/workshop? **Yes**

If yes, when? Semester: **Spring**

Year: **2018**

Average enrollment: **10**

19) May the course be repeated for credit? **No**

If yes, how many times can the course be repeated? First time is not a repeat, include only subsequent enrollments in the count.

If yes, for how many hours can the course be repeated?

20) Will this course be a substitute for a deleted course? **No**

If yes, which course:

a. If a course to be deleted is a 100/200 level course, how will deletion affect branch campus(es) programs.

21) Grade Options: Is this course to be graded on a CR/NC basis exclusively? **No**

a. If yes, provide a justification below:

b. Will the course be graded using a grading scale that is different from the standard catalog options? If yes, provided grading scale and justification below: **No**

22) Proposed first term of offering: Semester: **Spring** Year: **2020**

23) Upload course content syllabus. (upload Word or pdf of syllabus)

Course syllabus attached separately (see MGMT510_Syllabus.pdf)


24) Justification for graduate credit (If numbered below 500, indicate the nature of additional work to be required of graduate students).


25) Budgetary and faculty load implications (Each new course has such implications unless it is replacing a deleted course--Form A.) Upload a document that includes justification for the course, impact on long-range planning, detailed budget analysis, and faculty workload implications.) Outline below on this form or provide document to be uploaded.

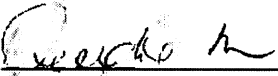
a. Justification for offering the course: **It is an elective course for the Masters of Science Project Controls, Project Management and Program Management**

- b. Impact on long-range planning: **The Masters of Science Project Controls, Project Management and Program Management is in demand and currently at capacity.**
- c. Budget analysis: **None. The faculty who has been teaching this course as a special topics course will continue to teach the course.**
- d. Faculty workload implications: **None, as stated above.**
- e. Content duplication or other conflicts: **None. This is a custom elective course for students in the Masters of Science Project Controls, Project Management and Program Management**

26) Does this new course have any special course fees or lab fees? If yes, what are they for and how much are they? (Please complete *Special Course Fees Approval Form*, available from the Provost's Office) **No**

 11/9/2018
Initiator Date

 11/14/2018
Departmental Admin. Asst. Date
(date first entered on myASM tracking)

 11/14/18
Program Specialist Approval (Asso. Dean's Office) Date


Approved Dept. Chair Date

 4/23/19
Approved Curr. Comm. Chair Date

 6/07/19
Approved Faculty Chair Date

Kathleen 8/12/17
Approved Associate Dean Date

Submitted to Main Campus w/ Form D
Submitted online to registrar Date
for Project Mgmt

Nikki Jennings/RCM 11/07/19
SGAC chair

D. Christine Williams 12/24/19
ASCC Chair

Dan 2/13/20
Associate Provost for Student Success



MGMT 510: Risk Analysis for Projects and Programs

Instructor: Nick Flor

Office Location: MCM 3082

Office Hours: Mon/Wed (9:00 AM to 11:00 AM)

Class Meeting Day(s): Online Course

Class Location/Room: Online Course

Email: nickflor@unm.edu

Office Phone: 505-277-7184

Course Credits: 3 Credit Hours

Class Time: Online Course

Term/Semester: Fall 2019

Course Description

Project risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives. Project risk management is the planning & implementation of processes for identifying, analyzing, responding to, monitoring, and controlling project risks.

The transformation of an idea into an implementation is never a linear track. Each step in the transformation has the potential to branch off and derail the project, sometimes permanently. A branch plus its likelihood constitute a project risk. The goal of project risk management is to identify these branches, to assign a likelihood of their happening, and to design branches back on track. Effective project risk management requires a manager to take a mixed-methods approach, where qualitative techniques for identifying risks combine with quantitative techniques for predicting and evaluating the costs of risks. While we will cover both qualitative and quantitative techniques, the emphasis of this course is on quantitative techniques for risk prediction and evaluation. The quantitative methods include neural networks, principal components analysis, Monte Carlo simulations, and Bayesian networks.

Course Goals and Student Learning Outcomes

This is mainly a hands-on class. You will spend significant time applying various techniques using technology. There are six learning objectives:

- Students can define the basic principles and theory that underpins project and program risk management

- Students can describe and Identify project and program risks
- Students can perform at least one of the qualitative project and program risk management techniques
- Students can perform at least one of the quantitative project and program risk analysis techniques
- Students can develop a project and program risk response plan
- Students can develop a plan to monitor and control project and program risks

Pre-Course Requirements

TBD

Required Text and Software

Project Management Institute (2009). Practice Standard for Project Risk Management. Newtown Square, PA: Project Management Institute. (required)

Fenton, N., and Neil, M. (2013). Risk Assessment and Decision Analysis with Bayesian Networks. Boca Raton, FL: CRC Press. (optional)

Accommodation Statement

Accessibility Services (Mesa Vista Hall 2021, 277-3506) provides academic support to students who have disabilities. If you think you need alternative accessible formats for undertaking and completing coursework, you should contact this service right away to assure your needs are met in a timely manner. If you need local assistance in contacting Accessibility Services, see the Anderson Graduate Programs office (<https://mba.mgt.unm.edu/advisement/>).

We will discuss fundamental project management concepts throughout the course. We provide guest lecturers, videos, lecture and a variety of texts for your reference. The main Project Management topics we discuss are:

Tentative Schedule of Topics

Week	Topics
1	Key Concepts, Case Studies, Software, Part 1
2	Key Concepts, Case Studies, Software, Part 2

3	Identifying Risks, Part 1
4	Identifying Risks, Part 2
5	Performing Qualitative Risk Analysis, Part 1
6	Performing Qualitative Risk Analysis, Part 2
7	Mid-Term Exam
8	Performing Quantitative Risk Analysis, Part 1
9	Performing Quantitative Risk Analysis, Part 2
10	Planning Risk Responses, Part 1
11	Planning Risk Responses, Part 2
12	Monitoring and Controlling Risks, Part 1
13	Monitoring and Controlling Risks, Part 2
14	Final Project Presentations
15	Final Project Presentations

Grading

50% Homework Assignments (approximately 10, often more—plan for one a week)

30% Exams (approximately 2)

20% Final Research Paper

Grading Scale

Course evaluating components are listed above.

Points (%)	Grade
100+	A+
95-99	A
90-94	A-
86-89	B+
83-85	B
80-82	B-
76-79	C+
73-75	C
Less than 72	C F D



Attendance Policy

Regular and punctual attendance is required. UNM Pathfinder policies apply, which in part means instructor drops based on non-attendance is possible. This policy applies regardless of the grading option you have chosen.

UNM Policies

Academic Integrity

The University of New Mexico believes that academic honesty is a foundation principle for personal and academic development. All University policies regarding academic honesty apply to this course. Academic dishonesty includes, but is not limited to, cheating or copying, plagiarism (claiming credit for the words or works of another from any type of source such as print, Internet or electronic database, or failing to cite the source), fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. The University's full statement on academic honesty and the consequences for failure to comply is available in the college catalog and in the *Pathfinder*.

Gender Discrimination

To meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg. 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>.

Copyright Issues

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

Accessibility

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring accommodation, please contact the UNM Accessibility Resource Center in 2021 Mesa Vista Hall at 277-3506 or <http://as2.unm.edu/index.html>. Information about your disability is confidential.

- Blackboard's Accessibility statement: <http://www.blackboard.com/accessibility.aspx>
- *Include links to accessibility statements for all other technologies included in the course.*

Drop Policy

This course falls under all UNM policies for last day to drop courses, etc. Please see <http://www.unm.edu/studentinfo.html> or the UNM Course Catalog for information on UNM services and policies. Please see the UNM academic calendar for course dates, the last day to drop courses without penalty, and for financial disenrollment dates.

UNM Resources

CAPS Tutoring Services: <http://caps.unm.edu/programs/online-tutoring/>

CAPS is a free-of-charge educational assistance program available to UNM students enrolled in classes. Online services include the Online Writing Lab, chatting with or asking a question of a Tutor.

UNM Libraries: <http://library.unm.edu>

Student Health & Counseling (SHAC) Online Services: <http://online.unm.edu/help/learn/support>

Cell Phones and Technology

As a matter of courtesy, please turn off cell phones, pagers, and other communication and entertainment devices prior to the beginning of class. Notify me in advance if you are monitoring for an emergency, for which cell phone ringers should be switched to vibrate.

Form B New Course Request Form

- Used to request new undergraduate and graduate courses. Courses that have been offered three times as a special topics course should be established as a new course for the fourth offering.

Name of Initiator: Steven Walsh Email: walsh@unm.edu Date: 10/18/2018

Phone Number: 505-681-4835 Initiator's Title: Distinguished Professor

Associated Forms Exist: No

Faculty Contact: Steven Walsh Administrative Contact: Vanessa Kline

Department: FITE

Admin Email: vgkline@unm.edu Admin Phone: 505-277-3756

- 1) Course Subject Code: MGMT 530
- 2) Course Number: Requested course number, verify with Associate Dean's office that course number is available. NGMT 530
- 3) Credit hours, select: Fixed or Variable
Number of credit hours assigned if fixed:
Range of credit hours, low to high if variable:
Table below reflects how the online form is structured. Credit hours must be completed both in **credit hours** and **lecture hours** rows. Lab hours can be used but not as common for Anderson classes.

		Credit Hours		
	Fixed	Variable		
	Credit	Low	Or/To	High
Credit hours	3			
Lecture Hours	3			
Lab Hours				

- 4) Long Course Title: **Advanced Project Management Techniques**
- 5) Short Course Title (30 characters max): **Adv. Project Management Tech.**
- 6) College: MG (Anderson School of Management)
- 7) Department: MGMT (Management) FITE

- 8) Subject code: MGMT (Management) Course number: 530

If the course will be crosslisted, indicate the courses:

Subject Code: Course number:

- 9) Give a full, precise and complete listing of the proposed new course, following the current format used in the UNM catalog, to be **no longer than 35 words**. Listing must include course number, title, credit, description, pre and/or corequisites, and restrictions:
MGMT 530, Advanced Project Management Techniques is a 3-credit course. We teach the concept and the application of advanced Project Management tools including; "Agile" project management principles, and a variety of agile techniques.

- 10) Course Level: GR

Graduate students will be allowed to enroll if they do not already possess this knowledge

If **Both** UG/GR is selected, complete the Justification for Graduate Credit Field.

- 11) Schedule Types (may be more than one)

Action: Adding schedule type

Schedule: Please circle: (may be more than one type, generally "Lecture" for Anderson classes)

Lecture

- 12) Co-requisites to this course: None

- 13) Restrictions: List any restrictions placed on students for registration in any section of this course. If none, write "None".

None

- 14) Pre-requisites for course: If the course has pre-requisites, list all of them, including course subject code and course number for each one, and include any appropriate conjunction (i.e., and, or) between each item and between any subsets of pre-requisites. If none, write "None".

None

- 15) Check the current UNM catalog to determine possible duplication of other course content. Provide correspondence and documentation from all departments you contacted.

No duplications

- 16) Is the course an elective or a required course for degree program? Elective
(If required a form C must also be submitted)

17) Technical Course (branches only): Not applicable.

18) Has this course been offered as a topics/workshop? No

19) May the course be repeated for credit? No

If yes, how many times can the course be repeated? First time is not a repeat, include only subsequent enrollments in the count.

If yes, for how many hours can the course be repeated?

20) Will this course be a substitute for a deleted course? No

If yes, which course:

21) Grade Options: Is this course to be graded on a CR/NC basis exclusively?

a. If yes, provide a justification below:

No, only offered for credit

b. Will the course be graded using a grading scale that is different from the standard catalog options? If yes, provided grading scale and justification below:

No

22) Proposed first term of offering: Semester: Spring Year: 2020

23) Upload course content syllabus. (upload Word or pdf of syllabus)

Attached

24) Justification for graduate credit (If numbered below 500, indicate the nature of additional work to be required of graduate students).

25) Budgetary and faculty load implications (Each new course has such implications unless it is replacing a deleted course--Form A.) Upload a document that includes justification for the course, impact on long-range planning, detailed budget analysis, and faculty workload implications.) Outline below on this form or provide document to be uploaded.

The faculty load justification

a. Justification for offering the course:

This course provides the fundamental baseline knowledge that anyone embracing project controls, project management or program management must have.

b. Impact on long-range planning:

Funding has been provided for this course from outside sources. As we move to graduate MS -PM and undergraduate courses in project management we will gain students and serve the community.

c. Budget analysis:

Funding has been provided for this course from outside-sources. We have generated new students without impacting our cost budget due to outside funding.

d. Faculty workload implications:

We are currently able to support the class and there are no current workload implications.

e. Content duplication or other conflicts:

None

26) Does this new course have any special course fees or lab fees? If yes, what are they for and how much are they? (Please complete *Special Course Fees Approval Form*, available from the Provost's Office)

None

Dr. Steven Walsh

Initiator

Date

4/24/2015



Departmental Admin. Asst.


Date

(date first entered on myASM tracking)

n/a

Program Specialist Approval (Asso. Dean's Office)

Date



Approved Dept. Chair

Date

10/20/18



Approved Curr. Comm. Chair

Date

4/23/19

Approved Faculty Chair

Date

K. M. Pal 8/12/19
Approved Associate Dean Date

Submitted hard copy to main campus w/
Submitted online to registrar Date
Form 8 for Project Management

Nikifernigan/RCB 11/07/19
SGPC Chair

A. Christine Lucas 12/24/19
SGCC Chair

Donna
Associate Provost for Student Success



MGMT 530: Advanced Project Management Techniques

Instructor: Steve Walsh

Office Location: ASM 2158

Office Hours: Mon/Thurs (12:00 PM to 4:00 PM)

Class Meeting Day(s): TBD

Class Location/Room: TBD

Asst. Professor: Grant Black (grantblack70@gmail.com)

Email: walsh@unm.edu

Cell Phone: 505-681-4835

Course Credits: 3 Credit Hours

Class Time: TBD

Term/Semester: Fall 2019

GA: Quan Huynh (quanh@unm.edu)

Course Description

This is an advanced techniques course in project management. This course covers key components of project management, including core "Agile" project management principles. We agree that there are many great project management software tools for you to use, but here we focus on only one tool. We will provide the basics of CA Agile Central (previously known as "Rally"), a Kanban board-type software. The class will check your learning on project management in the following manners: individual assignments, lecture interaction, discussion, midterm exam, learning checks, and team projects.


We will provide hands-on approaches and learning experiences in:

- Defensible Requirements gathering
- Kaizens (to develop root cause analysis on a team basis)
- Creating the appropriate ties for EVM formulas to agile activities and outcomes and show how they can be used to calculate EVM to meet compliant or certified EVM systems
- Rolling wave planning
- The potential use and value of various Agile methodologies
- Hands-on applications of some agile methodologies within the Lean/Agile family (Kanban, SAFe, Scrum)
- Communications and team activities that add value (push/pull comms/stoplight trees and SCRUMS)
- Estimation techniques (focus on Basis of Estimation techniques)
- Other project management methods via article review and team discussion in class

Course Goals and Student Learning Outcomes

This course deals with project management advanced techniques focusing on hands-on Agile activities and review of some project management best practices. This course is about “Doing the right thing, the right way, for the right reasons.” We will also introduce advanced topics in the field, such as new techniques and how the technological environment affects project management.

Upon satisfactory completion of the course, a student should be able to understand:

1. Projects and how Agile techniques can be applied
2. Basic project management principles
3. Earned Value Management (EVM) and how it differs from Agile techniques
4. CA Agile Central 
5. Basic project management tools such as: Project Controls, Scheduling, Budgeting, Risk Management
6. Requirements gathering
7. Work Breakdown Structure (WBS)
8. Basic terms and definitions


Student outcomes:

1. The successful student will be familiar with the most common tools that project controllers and project managers utilize.
2. The student will have an initial understanding of the language of project controllers and project managers, as well as be familiar with the process of managing a project and providing project control inputs.
3. The students will be expected to understand and utilize basic concepts of Earned Value Management (EVM), a concept initiated in the 1960's by the United States Air Force.

We have designed the course so that students can become more valuable to the ever-growing number of organizations that are generating more value from their projects than their general operations. Class time will consist of lecture, case discussions, students understanding of tools

and mentoring each team written work and oral presentations. Grading will be based on both individual and group efforts such as: learning checks, the mid-term exam, and the quality of team outputs which includes written and oral reports.

Pre-Course Requirements

Each student is expected to understand how to use Excel. We will provide tutorial on how to use CA Agile Central . We will help you load this in the first day of class. Each student will be required to generate knowledge in a number of general areas of project management and project controls. Each student will work on a project they select from a short list that the faculty will provide. This is an education-based, rather than a training-based, course. Each student will be required to bring a laptop computer to class. Tablets may be sufficient.

Required Text and Software

Course Books

- 1) **Agile Planning and Estimating**, by Mike Cohn, **ISBN-13:** 978-0131479418, usually available used on Amazon for \$20 to \$30
- 2) **SAFe 4.5 Reference Guide: Scaled Agile Framework for Lean Enterprises 2nd Edition**, by Dean Leffingwell, **ISBN-13:** 978-0134892863, available on Amazon for \$52.24
- 3) **Agile Practice Guide**, PMI & Agile Alliance, **ISBN-13:** 978-1628251999, available free as digital download for PMI members
- 4) **A Guide to the Project Management Book of Knowledge (PMBOK) 6th Edition**, by PMI, **ISBN-13** 978-1628251845, Available free as a digital download for PMI members
- 5) CA Agile Central (aka Rally) Kanban style software,
- 6) Software program,
- 7) **Scaled Agile Frameworks (SAFe 4.5) Tool** (available for free online), Process tool, <https://www.scaledagileframework.com/#>

Project Control and Project Management Focus

We derive the knowledge for teaching project controls and project management from our textbooks, reference books, guest lecturers, assigned articles, videos, and knowledge in our group. We provide segments of project management theory, practice, and the value of EVM throughout the course. Further, we will review your use of the CA Agile Central project management software.

Project Management Concepts

We will discuss fundamental project management concepts throughout the course. We provide guest lecturers, videos, lectures, and a variety of texts for your reference. The main Project Management topics we discuss are:

Table 1: Course Project Content Topics

The Analytical Topics
Advanced Project Management (Agile)
Agile Project Management Basics
Scope Definition & Requirements Gathering for Agile Teams
Scrum & Story Estimating
Agile Roles
Serving the Needs of the Product
Sprint Planning, Estimating, and Methods of Estimating
Creating Defensible Work in Estimating and Project Execution and Controls
Earned Value Management (EVM) in Agile
Scaled Agile Frameworks (SAFe 4.5)
Using CA Agile Central and its advantages
Overview of other approaches, terms, and nomenclature like waterfall

Grading

All assignments will be scored on the basis of 100 possible points. The actual points for the assignments will be multiplied by their weight and added together. The Learning Checks (LC) efforts are open book and open note. The LCs are "Take home" efforts and submitted in the designated class. This total will be expressed as a percentage score. Natural class separation will help to define your grade. We use a plus minus grading system to more equitable and accurately evaluate student performance. A letter grade will be assigned based on:

<u>Assignment</u>	<u>Weight</u>
Learning checks	30%
Mid-term exam	25%

CA Agile Central Project	15%
First oral presentation	10%
Written final report	15%
Class participation	5%
Total Weight	100%

Grading Scale

Course evaluating components are listed above.

Points (%)	Grade
100+	A+
95-99	A
90-94	A-
86-89	B+
83-85	B
80-82	B-
76-79	C+
73-75	C
Less than 72	C- F F0

Learning Checks

You are required to perform all Learning checks (LC). One of your LCs will be discarded so only the highest scores will count. The LC efforts are "Take home" efforts, but some will begin in class. They are to be submitted in the designated class.

Selecting Your Team

Teams will be randomly assigned. You do not always get to choose your team members in the professional environment. It is a valuable skill to be able to form a high functioning team at will. Your team will be provided with a "psychological contract" by the instructor to help improve performance.

Selection of Cases

All teams will analyze a case. Teams will receive a list of cases and will select one from among

those available. You may also bring your own case, subject to approval by the instructor and by your team.


Late Work


All work is due on the class specified (see the attached class schedule) and must be received at the beginning of the class period. Work that is turned in after class or the next day will be penalized ten points. An additional ten points will be taken off the work for each additional day late. Reasonable excuses submitted in writing at least seven days prior to the assigned date may receive written approval from the professor.



Attendance Policy

Regular and punctual attendance is required. UNM Pathfinder policies apply, which in part means instructor drops based on non-attendance is possible. This policy applies regardless of the grading option you have chosen.


Class Schedule



Date	Course Topic	Assignment Due date
Class 1	Introduction to Advanced Project Management (Agile) 1) Why do advanced Techniques exist? 2) The Agile Manifesto 3) Practical/hands-on driven use of tools and techniques 4) Interests/expectations/concerns from the class participants 5) Talk about Cases and Presentations In-class work on developing an understanding of terms & definitions  <ul style="list-style-type: none">• Install connection to CA Agile Central• Set up and introduction to the tool	Read article before class Agile Practice Guide Chapter 1 p. 1-6 HOLC1


	Learning Check 1. (Terms and definitions)	
Class 2 Dates	<p>Understanding Agile Project Management Basics</p> <ol style="list-style-type: none"> 1) Development of Project Management from Waterfall to Agile, and when to apply it 2) The Stacey Complexity Matrix 3) Dvir / Shenhar Diamond Model 4) Understanding PDCA (Deming), TPS, Lean, and path to Agile 5) Typical Agile terms, ceremonies, and stages (reminder to talk about the variances in sprints in different methodologies) 6) Project methodologies in Agile (focus on Kanban, Scrum and SAFe in class) 7) Project Planning basics (team, stakeholders, teaming agreements, processes to adopt) 8) Progress reporting as a live “pull” system 9) Cases study “Cars are not People” HBR cases <p style="text-align: center;">  </p> <ul style="list-style-type: none"> • Troubleshooting and follow-up on set-ups <p>In-class work on developing a charter for your case LC2. (Agile terms and ceremonies)</p>	<p>Agile Practice Guide Chapter 2 p. 7-16</p> <p>SAFe Chapter 1 p. 1-12</p> <p>HILC 1 HOLC2</p>

	<p>Reading:</p> <p>Kaiser, M.G., El Arbi, F. and Ahlemann, F., 2015. Successful project portfolio management beyond project selection techniques: Understanding the role of structural alignment. <i>International Journal of Project Management</i>, 33(1), pp.126-139.</p>	
<p>Class 3</p> <p>Dates</p>	<p>Scope Definition & Requirements Gathering for Agile Teams</p> <ol style="list-style-type: none"> 1) Requirement gathering 2) Defining Work Scope and WBS in a Kanban tool 3) RACI / RASIC  <ul style="list-style-type: none"> • CA Agile Central Walk Through and sample of in-progress Kanban view • Understanding the story view (task list) <ol style="list-style-type: none"> 4) Building a sample story for our practice tool this semester 5) Incorporating the Definition of Done into the task requirement 6) Assigning Responsibility and Accountability <p>In-class work on project scope and launch point for client project (Will we have a client ... if so, appropriate items will be added throughout semester?)</p> <p>LC3. (Develop Stories)</p>	<p>Agile Practice Guide Chapter 3 p. 17-32</p> <p>SAFe Chapter 2 p. 209-223</p> <p>HILC 2 HOLC 3</p>
<p>Class 4</p> <p>Dates</p>	<p>Scrum & Story Estimating</p> <ol style="list-style-type: none"> 1) Daily Scrum basics and roles (PO, SM, ST) 2) Scrum for teams 3) Critical Path and Network Diagrams via Agile 4) Story Estimating via Agile (planning poker, affinity sizing,  <ul style="list-style-type: none"> • Story Estimating 	<p>SAFe CH. 4 p. 203-217</p> <p>Agile Estimating and Planning Part 2 p. 33 - 75</p> <p>HILC 3 HOLC 4</p>

	<ul style="list-style-type: none"> CA Agile Central as a scheduling tool <p>In-class work on project story development and sizing LC 4. (Scrum with the team (scrum master practical))</p>	
Class 5 Dates	<p>Agile Roles</p> <ol style="list-style-type: none"> 1) Introduction to Roles 2) Specific needs of the Product Owner role (PO) 3) Specific needs of the Scrum Master role (SM) 4) Specific needs of a Scrum team (ST) <p>In class work on Agile Roles LC 5. (Applying Agile Roles)</p>	<p>Agile Practice Guide Chapter 4 p. 33-48</p> <p>SAFe CH. 2 p. 171-175</p> <p>HILC 4 HOLC 5</p>
Class 6 Dates	<p>Serving the needs of the Product Further discuss Product development and planning</p> <ol style="list-style-type: none"> 1) Product Roadmap 2) Release Planning (refinement) 3) Product Backlog <div data-bbox="729 1152 850 1253" data-label="Image"> </div> <ul style="list-style-type: none"> • Backlog • Backlog grooming (insert stories for their use) • Open Kanban for their practical projects <p>LC 6. (Sprint Planning and Burndown exercises) In-class exercise review for Mid-term exam</p>	<p>Agile Practice Guide Chapter 5 p. 49-70</p> <p>SAFe CH. 5 p. 329-370</p> <p>Agile Estimating and Planning Part 4 p. 129 - 206</p> <p>HILC 5 HOLC 6</p>
Class 7 Dates	<p>Sprint Planning / Estimating / Methods</p> <ol style="list-style-type: none"> 1) Iterative or Incremental 2) Estimating team capacity (new vs established) 3) Techniques for Sprint estimating 4) Keeping everything in context of the customers' needs 	<p>Agile Practice Guide Chapter 6 p. 71-86</p>

	<p>In-class work on critical path development LC 7. (Sprint Planning and Burndown exercises)</p>	<p>Agile Estimating and Planning Part 4 cont. p. 129 - 206</p> <p>HILC 6 HOLC 7</p>
Class 8 Dates	Mid-Term Exam	
Class 9 Dates	<p>Creating Defensible Work in Estimating</p> <ol style="list-style-type: none"> 1) Basis of Estimate Fundamentals 2) Documented, repeatable, credible estimates with appropriate rigor and consistency of approach ... in an Agile environment 3) Some ties with the Cost Estimation world 4) Refinement in estimating team capacity <p>Project Execution and Control</p> <ol style="list-style-type: none"> 1) Sprint Retrospectives 2) Information Radiators 3) Sprint Burndown 4) Release Burndown <p>In-class work on project estimation LC 8. (90% Conviction estimation questions)</p>	<p>Agile Estimating and Planning Part 5 & 6 p. 207- 250</p> <p>Outside Reading AACE Cost Estimation Article</p> <p>HILC 7 HOLC 8</p>
Class 10 Dates	<p>Earned Value Management (EVM) in Agile</p> <ol style="list-style-type: none"> 1) Introduction to Earned Value Management 2) Formulas and Meaning 3) Performance measure calculations 4) DOE Gold Card <div style="text-align: center;">  <p>technologies</p> </div> <ul style="list-style-type: none"> • Reports in CA Agile Central 	<p>Outside Reading Basic Concepts of EVM and Agile</p> <p>HILC 8 HOLC 9</p>

	In-class work on EVM Agile formulas LC 9. (Demonstrate understanding of EVM in Agile Environment)	
Class 11 Dates	Scaled Agile Frameworks (SAFe 4.5) <ol style="list-style-type: none"> 1) Introduction to SAFe 2) Where can SAFe be applied? 3) Teams and activities in SAFe 4) The Release Train concept 5) The Program Layer  <ul style="list-style-type: none"> • Creating swim lanes and segregating work 	SAFe CH. 1 p. 13-82 Outside Reading SAFe Concepts HILC 9 HOLC 10
Class 12 Dates	In-class work on EVM Agile formulas LC 10. (Demonstrate understanding of EVM) Scaled Agile Frameworks (SAFe 4.5) session 2 <ol style="list-style-type: none"> 1) The Large Solution Layer (Rework of Value Streams) 2) The Portfolio Layer  <ul style="list-style-type: none"> • Understanding the role of Epics, and the story layers • Tying SAFe together with the tools we already know • Reviewing our Kanban work via the lens of SAFe • Change Management • Work acceptance and the Definition of Done 	SAFe CH. 7 & 8 & 9 p. 497-641 Outside Reading SAFe Concepts HILC 10 HOLC 11
	In-class work on enterprise layers LC 11. (Large solution sets and scaled Agile layers)	

Class 13 Dates	Executing a Project Using CA Agile Central (“Rally”) <ol style="list-style-type: none"> 1) Final concepts and prep for client briefing on your approach, methodologies, success factors, and how you utilized Agile processes to give the results. 2) Open topics for exploration 3) Crosstie concepts and learning to work with traditional PM tools <ol style="list-style-type: none"> a. CA Agile Central and Primavera P6 b. WBS and CA Agile Central  <ul style="list-style-type: none"> • Execute your final stages of client case on CA Agile Central 	Hi LC 11 Shared leadership & project management
Class 14 Dates	CA Agile Central-based Presentation for client projects/for class final if no client project.	
Class 15	Make up class session if needed	

The Schedule of Activities is subject to change. Minor changes will be announced in class, major ones provided in writing.

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CAPS Tutoring Services: <http://caps.unm.edu/programs/online-tutoring/>

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