This course of study outlines the sequence of learning activities to help you develop competence in the subject area of your Information Technology Capstone Project (CPW[1-6] depending on your major). A series of performance tasks will assess your competence. This course of study may take up to eighteen weeks to complete depending on your educational background, work experience, and the time you are able to dedicate to your studies. Consult with your mentor if you wish to accelerate your progress through this course of study.

Introduction

The capstone project is your final performance assessment. In it you demonstrate your ability to integrate and synthesize competencies from domains across your degree program. The foundation of the capstone is the solution of a real problem. With the permission of their employers, some candidates have used work-related projects as the basis for their capstones. The project has four phases. Some phases will take longer than others, and part of your job here is to produce realistic time estimates.

You have previously developed a proposal for your capstone project when you worked on the technical writing assessment. Now you will complete the project, finalize the report, and prepare the other documentation. If you have not yet completed TWA1- Technical Writing, do not proceed with the Capstone Project.

Competencies

This course of study covers the following competency:

Competency: CapstoneThe graduate integrates and synthesizes competencies from across the degree program and thereby demonstrates the ability to participate in and contribute value to the chosen professional field.

Required Learning Resources


WGU Library
Preparing for Success

You will schedule CPWn through your AAP to enable you to submit your project in TaskStream when it is ready. Your mentor will help you to determine the best time to schedule this assessment.

Topics

The Preliminaries

There are just a few things to do before you begin the actual work of executing your project. These activities are simple and should not take much time. They are, however, very important.

Resources

Capstone Overview
URL: https://web5.wgu.edu/aap/content/capstone%20presentation.pdf

Take a moment to review the Capstone Project Presentation. The presentation will walk you through the big picture, potential capstone formats and other important aspects of the capstone process. You can download a copy of the presentation at the above URL.

Capstone Template
URL: https://web5.wgu.edu/aap/content/BS-CIS%20&%20BS-IT%20Capstone%20Quick%20Format%20Template.doc

To make life a little easier for you, we've put together a Microsoft Word template to help you build your final capstone report. You can download that document by clicking on the above URL.

Scheduling Your Capstone (CPWn) Assessment
URL: http://www.taskstream.com

This is a performance assessment for submission in TaskStream, so you must first schedule the assessment in your AAP by following these steps:

Log in to your MyWGU Student Portal.

Go to the "My AAP" tab.

In the list below "Course Details," find the assessment you are working on.

In the "Assessment Scheduled Date" column, click "Schedule Now."

A new window will come up. If there are other considerations about which you would like to
inform the Assessment Delivery Team, discuss them in the "Other Considerations" box that appears and then click "Continue." If not, simply click "Continue."

A request will be sent to your mentor for approval.

Once your mentor has approved your request, our Assessment Delivery Team will open the tasks required for the assessment in TaskStream. You will log in to TaskStream to receive the instructions, see the rubric, and submit your assessment for grading.

After mentor approval, the Performance Evaluation Department will update your TaskStream account so that you can eventually upload your project for grading. You may already know that evaluation of your work can take several days, so please have patience.

**Capstone Schedule Checklist**
URL: https://web5.wgu.edu/aap/content/BS-CIS%20&%20BS-IT%20Capstone%20Schedule%20Planning%20Check%20List.xls

A plan with milestones is invaluable to keep you on track to finish within a reasonable time frame. An Excel template is available at the URL above. Fill it out and send it to your mentor, who will monitor your progress to help you stay on track. As you work your way through the assessment, send an updated checklist to your mentor every week.

**Publication Manual of the American Psychological Association**
URL: http://www.apastyle.org/

WGU requires APA format for all writing assignments. You must acquire the current APA guidebook to help guide your structure and formatting. Information on the current manual is available at the website given above.


Note: The WGU Bookstore has this book available for immediate purchase and delivery. You may shop at other online bookstores, but be sure to order early and use the correct ISBN to get the correct edition.

**Course of Study Message Board**
Message boards are an important part of the WGU experience. In the lower right-hand corner of the course of study screen, there is a message board area. Throughout your studies, you will want to follow the questions, observations, and responses of the other candidates and the expert advice of the course mentor. If you have questions of your own, do not hesitate to use this
resource to get those answered as you develop your competencies.

**Study Notes**
As you engage in the activities throughout this course of study, you will be answering questions, completing exercises, sketching out concepts, and so forth. You have the ability to take these notes online through the web-enabled course of study. A notebook or study journal (either paper or electronic) makes your learning more active. It also provides an excellent source of important materials to review prior to demonstrating your competencies through the assessment.

**Access Sources in the WGU Library**
To develop the literature review portion of your capstone, you will draw from various sources. The books and full-text articles housed at the WGU Library are a good place to obtain that information. The WGU Library is accessible from the "Resources" tab of your AAP; click the "Library" link. One or more examples of successful Capstone Projects are in the "E-Reserves" section, and all major research databases are available for your use. Be sure to make note of the various usernames and passwords that you may need; they are on the "WGU Library Log-in Info" screen that you will see prior to entering the WGU Library.

**Writing Resource, Optional**
As you develop your project, you probably will not need too much assistance. Nevertheless, even the best writers benefit from "another set of eyes" to help clarify ideas, identify mechanical issues, and apply the APA guidelines. The Smarthinking Writing Lab is available to all WGU candidates. Your mentor will provide a referral to the Writing Lab, if you request it.
Capstone Project Completion Phase

Depending on your project, you could finish quickly or over a span of several weeks. If you are importing a project from your work, it may be that only a week or two of tweaking is needed to bring it into step with capstone project requirements. If you are working from scratch, you may need the full eight to nine weeks. Under no circumstances should you undertake, from scratch, a project that you expect to take longer than nine weeks to execute prior to writing the capstone report. Keep in mind that the capstone report requires that, as you proceed with the project, you maintain the supporting material for the requirements in an organized way. The extra effort needed to do that now will save time later.

Topics

Executing the Capstone Project

In TWA1, you constructed a proposal for the capstone project. Now it is time to carry out your proposal. It is rare that projects go exactly according to plan. Keep an eye on the execution so you can make note of any departures. You can learn a great deal from what does not go as planned.

Resources

Execute Your Capstone Project Plan
It is now time to execute the plan that you devised in the Technical Writing assessment. Review the plan with any parties who have a stake in it; you may find a need to revise it.

Obtain new permission to proceed with any part of the project related to your employment.

Execute the plan, revised or original.

Make explicit revisions to the plan.

Keep accurate notes on the process:
• What changes were made to the plan, and why?
• What went better than planned?
• What was more difficult than expected?
• Was there anything that was not possible to complete?

Justify departures from standard practice (e.g., If you could not construct a flowchart in its standard format, why not?)

Keep your mentor and the course mentor apprised of anything that you consider significant in the execution of your plan.

Prepare Capstone Project Deliverables and Documentation
Prepare the planned deliverables and documentation as they occur in the course of execution.

Obtain your employer’s permission to include any deliverables or documents that arise from your employment, even if the project itself does not.

Include project documentation for use by others (e.g., user manuals or software documentation). These may not need to adhere to APA format.

Use appropriate software to construct visuals.

Use appropriate software to construct documentation.

Properly label all visuals (exhibits, tables, figures, etc.).
Capstone Report Writing Phase

Writing not only presents ideas, it generates them. Write carefully and well so that the ideas you generate are sound. As in the previous phase, this phase might go quickly, or it could take up to a month to complete. If a project imported from your employment only needs minor changes to align with capstone project requirements, you may only need a week or two for writing. You should not need more than four weeks for writing.

For most students, the capstone report represents the final academic exercise before graduation. It exemplifies the work quality of which you are capable, as well as your grasp of the competencies to which you lay claim. What was the last thing that you wrote? Were you happy with it? Do you have a favorite writing reference? Keep it close.

Topics

Write the Capstone Report

The need to write never goes away, and what you write stays around after you go. Those who read your work but do not know you will judge you by it, and those who do know you will judge silently, so write well.

Resources

Write Capstone Report Introduction
The capstone report introduction (suggested length of five to eight pages) is an overview of the project. Discuss the actual development, summarize the rationale, outline the systems analysis of your project, and review other work done in the same area (literature review). Some of this will represent a restatement of work that has already been done, but much of it will be new content, written to reflect the fact that your project is done.

The introduction should open with a description of your project, followed by a summary of the actual project development. To put your project into a larger context, you will restate the review of other work (literature review) from your capstone proposal with an expansion called for from the actual development of the project. Finally, the introduction closes with a discussion of the project’s rationale and the systems analysis performed to arrive at the deliverables.

Review Capstone Project Goals and Objectives Section
Review the goals and objectives (suggested length of three to five pages), describing each in detail. Explain how you did or did not achieve them. Goals and objectives are not always technical in nature. Some of them will reflect the business or organizational unit goals.

Organize this section by individual goal and objective. For each goal and objective, explain how your project succeeded or failed. Your list of goals and objectives will come from your capstone proposal, although you may add to the list if your project identified unanticipated goals and objectives.
Discuss Capstone Project Plan and Timelines
Review your experience (suggested length of three to five pages) in using your project plan to develop the capstone project. You will provide a plausible explanation of why you did or did not meet stated timelines.

Organize this part in one of two ways: (1) list the milestones consecutively, and describe why they were or were not met; or (2) organize by deliverable, with a discussion of how each was or was not provided on time.

Discuss Project Development
Provide a credible and supported explanation (suggested length of three to five pages) of what the project accomplished. Discuss problems encountered, modifications made to the project plan, and reasons for those modifications. Also, address unanticipated requirements. Finally, discuss actual and potential effects of your project, developing a set of conclusions about the project’s success and effectiveness.
Capstone Document Preparation and Grading Phase

Just as a quality product must also look good to appeal to potential buyers, your paper must look
good to set proper expectations for readers; excellent appearance forecasts excellent work. A lack of
attention to detail here will cast the entire project in a poor light, so do not rush this. Do you tend to
skip over formatting issues in your word processor because you do not know how to fix them? The
timing allotted to this phase reflects initial grading time. Depending on the project, assembling your
work into a presentable package should not take more than two weeks, even if you began from
scratch. Add to that a week for evaluation, and you should be all done by week 18.

Topics

Assemble and Submit the Capstone

Combine the report produced in the last phase with several ancillary items for assembly into the
completed project. Submit the package for evaluation.

Resources

Prepare Capstone Cover Sheets
The cover sheet should contain the following information:

capstone project title

your name

your degree program

your mentor’s name

signature blocks (A space for your mentor’s signature and your signature and the date. Your
mentor will sign this when the proposal is approved.)

The cover sheet should look like this:

Prepare Competency Matrix
The purpose of the competency matrix is to allow you to state precisely which competencies you
demonstrate in your project. Your project should demonstrate mastery of at least 10 different
competencies from the following domains:
Leadership and Professionalism

Upper Division Collegiate Level Reasoning and Problem Solving

Language and Communication

Quantitative Literacy

The project will also demonstrate competency in at least one of the following Information Technology domains:

Software

Networks

IT Management

Project Management

Security

Database

If you have an area of emphasis in your degree program (e.g., security, network administration, databases, or software), at least one of the selected domains must reflect the emphasis. For example, if you are in the BSIT-Security Emphasis degree program, you must demonstrate competency in the Security Domain, although you may also demonstrate other competencies as well. Here are sample entries from one candidate's competency matrix:

In the first column, write the domain to which the competency belongs. In the second column, write the competency you are demonstrating (do not just list a number). In the third column, give a brief explanation of how your capstone project demonstrates mastery of the competency.

Explain how your capstone project will demonstrate your competence in each of the following areas:

Leadership and Professionalism

Upper Division Collegiate Level Reasoning and Problem Solving
Language and Communication

Quantitative Literacy

Explain how your capstone project will demonstrate technology competence in at least one of the following areas:

Software
Networks
IT Management
Project Management
Security
Database

You can find competency lists for each domain in one of two ways:

Look in the WGU Student Portal's "Resources" tab, under "Degree Resources." Follow the link for Information Technology to a page that has links to each degree’s competencies.

There is also a competencies tab on each assessment's detail page.

Prepare Other Necessary Sections
Prepare any other documents that are required (e.g., table of contents, bibliography, references, appendices) to complete your capstone report. You will likely have developed each section of your report as separate documents. However, other sections may need preparation before you can pull all of them together. Virtually all word-processing software will generate a table of contents if you have used named styles in your document.

Other sections that may need preparation include the bibliography of works cited in your capstone proposal and any appendices that your proposal requires.

Compile All Sections of the Capstone Report
At this point, your work is perhaps a collection of individual parts. You must now gather them into a single document. Your capstone report should be a single word-processing document. List files from other programs as appendices to submit for grading; include them in an attached ZIP file.
Review all sections of the capstone report for language, APA format, etc.

Submit Capstone Report in TaskStream
URL: http://www.taskstream.com

Make sure that you have a backup of the final report, including all attachments.

Revise Capstone Project
In the event that your capstone project is deficient, you will get it back with feedback for revision. Otherwise, your AAP receives a "Pass." Below is a link to the rubric used for evaluation.

URL: https://web5.wgu.edu/aap/content/ug_capstone_rubric.pdf
Conclusion

Congratulations! You have completed the capstone!

Topics

Review of Competencies

In completing this assessment, you have satisfied the IT Capstone (CPW [1-6]) assessment.

Competency 981.1.1: Capstone The graduate integrates and synthesizes competencies from across the degree program and thereby demonstrates the ability to participate in and contribute value to the chosen professional field.

Transfer/Application to Work: How Will You Apply This Knowledge?

You have learned much about executing a project. These skills are directly transferable to the IT workplace. A well-done, correctly executed project is the cornerstone upon which rests the success of organizational change. The experience should impart to you the confidence to make a solid contribution in any project in which you are involved.

Next Steps: Graduation

This is normally the last assessment in a program. If that is the case, then you have earned additional congratulations. If more remains in your program, then contact your mentor for your next steps.

Feedback

If you wish to provide feedback on this course of study, please contact Charles Paddock at cpaddock@wgu.edu.

Click here to review University ADA policy.