This course of study outlines the sequence of learning activities to help you develop competence in the subject area of TWA1. Your competence will be assessed as you complete a series of performance tasks. This course of study may take up to eight 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 through this course of study.

Introduction

The fact that you are here, working on TWA1, means that you are a hair’s breadth from completing the requirements of your degree. That is indeed good news! At the completion of this assessment, you will have the proposal for your capstone in hand, so this assessment is actually the first step in your final approach to graduation.

Most IT projects begin with a formal proposal, and TWA1 will give you experience in doing that. Formal proposals generally include requirements, a summary, how requirements are met, how the project will be managed, cost analysis, and implementation plans and schedules. Putting together a document like this will draw on many of the competencies that you acquired during the course of your program, and you will probably see some of those competencies in a new light.

At the end of it all, you will experience the satisfaction of knowing how it feels to enter a project well prepared. You may find yourself wanting to be thorough in your personal planning as well. Thorough planning makes for well-informed decisions and actions, and that is a key to business success.

There is one competency covered in this course of study:

Competency: Project ProposalThe candidate prepares a project proposal according to the guidelines specified in the program guide.

Required Learning Resources

Preparing for Success

You will schedule TWA1 through your AAP to enable you to submit your proposal in TaskStream when it is ready for submission. Your mentor will help you determine the best time to schedule this assessment and help you determine which learning resources you will need in order to develop technical writing competence.

Topics

The Preliminaries

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

Resources

Scheduling Your Technical Writing (TWA1) Assessment

This is a performance assessment that will be submitted via 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 you would like to inform the Assessment Delivery Team about, 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 proposal for grading. You may already know that grading can take several days, so please have patience.
Schedule Planning Checklist
URL: https://web5.wgu.edu/aap/content/Technical%20Writing%20Quick%20Format%20Template.doc

The technical writing assessment is complex. Consequently, a plan with milestones is invaluable to keep you on track to finish within a reasonable timeframe. A 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.

Technical Writing Template
URL: https://web5.wgu.edu/aap/content/Technical%20Writing%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 Technical Writing report. You can download that document by clicking on the URL above.

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 students 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.

Publication Manual of the American Psychological Association


WGU requires APA format for all writing assignments. You must acquire the current APA guidebook to help guide your structure and formatting. The WGU Bookstore has these books 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.
Technical Writing Competency Development Phase

It is difficult to prescribe a learning path through this phase because students enter with a variety of backgrounds. Is yours heavy on the technical side but light on user communication? Or do you write well but lack an understanding of technical issues? The ability to produce clear technical communication is an important skill; it is hard to find an IT job description that does not mention the desire for coherent communication ability. Take the time now to reinforce your previously-acquired competencies and develop them further.

Topics

Starting the Process

Where do you start? Where is the beginning? The start of a project can seem overwhelming because it is not always clear where to begin. This topic suggests two things to help you get a handle on what must be done and how to do it:

- Participate in the Technical Writing Subject Area Message Board.

Resources

Participating in the Message Board
You should not underestimate the value of collaboration with the technical writing subject area mentor and with other students who are working on this assessment. The heart of this feature is the course of study message board. Use it to initiate, focus, and refine your ideas. Get help with things outside your expertise. Your fellow students have a variety of backgrounds, and someone can help.

Reviewing the Publication Manual of the American Psychological Association
URL: http://owl.english.purdue.edu/owl/resource/560/01/

First, read the grading rubric for TWA1 in TaskStream. The technical writing assessment rubric is based on the APA manual. Consequently, you should be familiar with its contents, too. Having read the rubric, you are in a better position to get more out of chapters 2 and 3 in the manual; they are especially useful during these early stages. Chapter 2 covers manuscript structure and content, and chapter 3 covers writing clearly and concisely.

A search on the Internet will locate numerous other resources that will help you prepare your proposal so that it meets these important requirements.

The OWL (online writing lab) at Purdue is an excellent resource for brushing up on your writing
skills and the APA format. Visit the site at the link above.
Capstone Project Topic Definition Phase

It is time to nail down a topic for your capstone to turn into a proposal. In some respects, this is the hardest part of the process because the temptation is to be broad. You will work with your mentor to determine an appropriate topic for your capstone project. Where does your expertise lie? If your degree program has an emphasis, what interests you about that emphasis? What do your peers say about your idea? Have you queried them on the message board?

Topics

Defining the Topic

To a certain extent, brainstorming and lots of thinking helps. The trick is to focus your thinking as soon as you can. The activities that follow will help you do that.

Resources

Reviewing the Capstone Course
Although the proposal you complete during this assessment is the immediate goal, the capstone is the destination. Consequently, a review of the capstone course will help you make sure that your proposal is on target. Obtain the capstone course of study from its "Learning Resources" tab in your AAP.

Selecting a Format
The capstone's format can take on one of four forms: intellectual product or service; physical product or service; event or activity; or system improvements or enhancements:

Intellectual Product or Service: This is an analytical, critical paper that investigates an aspect of the information technology field directly related to your program. This paper can be an investigation of newly-introduced, cutting-edge technology or another approved topic.

Physical Product or Service: This is a design of a service or system that reflects awareness of similar work done by others, and is relevant by design standards and regulation.

Event or Activity: This is an event or activity scheduled, planned, and carried out that specifically relates to your program.

System Improvements or Enhancements: This is a written document or physical artifacts that provide detail about intended outcomes of the project improvements or enhancements, including information about the originating problem or need.

Determining a Topic
You have a great deal of flexibility in selecting a topic after you have determined the capstone format. Here are several recent examples:

From the BSIT Program:

Virtualization pilot for server consolidation
Migration from Novell Groupwise 7 to Microsoft Exchange 2007
Choosing the right IT frameworks for your organization
Reorganizing course content repository to improve reuse

From the Network Administration Emphasis:

IT and network security
Server consolidation and virtualization
CalWin software deployment using SMS 2003
Thin-client implementation
Incident management
LANDesk implementation
Network implementation for XYZ Solutions, Inc.
Testing network for network monitoring system verification
Worldwide information technology modernization (WITM)
Adding an e-commerce department to the business-depot store
Soil moisture sensor network
Technology disaster recovery plan

From the Security Emphasis:
Implementing a streamlined information assurance program
Upgrading point-of-sale software to securely store credit card data
Securing a wireless network
Network monitoring with service-level management
Generic security design for a hospital
Personal information privacy protection project
Single sign-on integration with corporate active directory

From the Software Emphasis:

Using IBM rational automation in manual testing environments
SharePoint 2007 Server for enterprise collaboration and document management
Clock synchronization tool for handheld devices

From the Database Emphasis:

Building a global rock climbing database
Implementing dynamic update website capabilities

**Writing Idea Paper**
After determining an appropriate topic for your capstone project, you will expand it into a one to two page idea paper that fleshes the topic into more detail. Your mentor must approve the idea paper before you begin your proposal.
Capstone Proposal Development Phase

Now you will do the majority of the work for the Technical Writing (TWA1) assessment; you will compose the proposal to be graded. The proposal will be used to direct the completion of your capstone project. The capstone proposal serves several purposes. First, it enables you to demonstrate your competence in the technical writing domain. Second, it provides a way for you to communicate your proposed capstone project to your mentor and other IT faculty members who might express an interest. Finally, it helps you organize your ideas for the capstone so you can complete it in a timely and efficient manner.

The proposal explains how you plan to approach and carry out your project. Are you comfortable with your current writing skills? Do you have one or more people in mind who can review your work, especially with respect to its clarity? Are you comfortable with your topic? The capstone project that you are proposing will follow one of the following four formats:

Intellectual product or service
Physical product or service
Event or activity
System improvements or enhancements

Note: Work performed on contract for a third party or for an employer is their property. You must obtain their permission to include the work.

Topics

How to Construct the Proposal

URL:
https://web5.wgu.edu/aap/content/Grading%20the%20language%20aspects%20of%20your%20assessment.pdf

This is where the serious writing begins. If you want further information on the rubric or on the APA formatting and writing style, visit the "Language Aspects of Your Paper" website above to see a set of slides that neatly summarizes what you have already reviewed in more detail earlier. Take small bites and chew well. Talk to your mentor about pacing; it is well worth the extra effort to stay on pace.

Resources

Writing a Summary
Provide a summary (about three to five pages) of your proposed capstone project. Your idea paper will serve as the starting point for the summary. The summary, however, includes coverage of all sections in the proposal.

**Writing a Review of Other Work**
In this section (about two to three pages), you will review other work that is relevant to your capstone project. Perhaps there are case studies of similar projects, comparisons of various solutions, or related articles. For example, if you are planning a network security project, you might choose to summarize articles that describe the business case for improved security, comparisons of various hardware and software products that are possible alternatives for your project, and case studies that relate to the project you are planning.

**Writing a Rationale and Systems Analysis**
This section (about two to three pages) discusses the reasons for implementing the project described in your proposal; they may consist of both business and technical reasons. It also summarizes the systems analysis that you have done for your capstone project.

**Writing Goals and Objectives**
List the goals and objectives (five to eight pages) of your capstone project. Describe each in detail and explain how the project will help to attain them. You should note that goals and objectives are not necessarily technical in nature. Some of them will reflect business or organization goals. You should also discuss how you would recognize reaching the goals and objectives.

**Writing Deliverables**
Explain in five to eight pages what types of deliverables your project will provide. For example, you could explain that your project will include some sort of formal report. It will likely also include a technical IT product and a user's manual or other documentation.

**Writing Plan and Timelines**
Include in your proposal a projected timeline for your capstone project, with milestones. In this section, you will demonstrate the IT project management skills that you have developed during your degree program. Remember that these are estimates made before you even begin the capstone project. It is not uncommon for project plans to require revision once the project is underway.
Technical Writing Document Preparation and Grading Phase

This is about packaging, and it is important. The appearance of obvious items can affect the way that content is viewed. If you are going to buy something, do you want it to look good, or is it okay if it looks so-so? This phase of the assessment is critical; it is where remaining sections of your capstone proposal are developed, and where all sections are assembled into the document that is submitted for grading. In this phase, you will also do a final check of grammar, mechanics, and APA format. After the capstone proposal is submitted for grading, the results are usually returned to you in three to five business days. You should note that if the grading finds deficiencies in your proposal, you are responsible to modify and resubmit it for additional grading. A little extra advance work can help minimize post-grading revisions.

Topics

Technical Writing Document Preparation and Grading

There are seven activities for this topic:

- Prepare the technical writing cover sheet.
- Develop the competency matrix.
- Prepare other sections (e.g., table of contents, bibliography, appendices).
- Compile all sections of the capstone proposal into a single document.
- Review all sections of the capstone proposal for language, APA format, etc.
- Submit capstone proposal to the Technical Writing (TWA1) assessment in TaskStream for grading.
- Revise the capstone proposal if it does not meet the requirements of the rubric.

Resources

Preparing Cover Sheets
The cover sheet has the following information on it:

- Project name
- Your name
Developing the Competency Matrix
The purpose of the competency matrix is to have you state precisely which competencies are demonstrated in your proposal. In addition to the Technical Writing competencies, your proposal should demonstrate your 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 proposal 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 selected an emphasis for your degree (e.g., security, network administration, databases, or software), then at least one of the selected domains must reflect the emphasis
area. 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 student'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 the capstone 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

Information Technology Competency: 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:

It is in the WGU Student Portal's "Resources" tab, under "Degree Resources". Follow the link for "Information Technology" to reach a page that has links to each degree's competencies.
There is also a "Competencies" tab on each assessment's detail page.

**Preparing Other Sections**
Prepare any other documents that are required to complete your proposal (e.g., table of contents, bibliography, appendices). You will likely have developed each section of your capstone proposal 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 proposal and any appendices that your proposal requires.

**Compiling All Sections Into a Single Document**
At this point, your work is perhaps a collection of individual documents. You must now compile them into a single file. Your proposal should consist of a single word-processing document. If you have file listings from other applications (e.g., a flowchart) then put them in an appendix and submit a ZIP file.

**Reviewing All Sections for Language, APA Format, Etc.**
URL: http://www.smarthinking.com/static/productsServices/OWL/

As you develop your proposal, 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 SMARTTHINKING writing lablinked aboveis available to all WGU students. It provides online tutoring and will critique your writing. To read SMARTTHINKING's explanation of their lab, go to the above website. Your mentor will provide a referral to the writing lab, if you request it.

**Submitting to TaskStream for Grading**
URL: http://www.taskstream.com

Make sure that you have a backup of the final report, including all attachments. Then submit your final report in TaskStream.

**Revising the Proposal If Needed**
If your proposal is deficient, you will receive it with feedback to indicate the areas requiring revision. Otherwise, a "Pass" is entered into your AAP.
Conclusion

Congratulations! You have completed TWA1 and the capstone proposal! For your convenience, screenshots showing the instructions for each performance task related to this course of study are available at the links below. Please note that the instructions may change slightly from time to time. For the most up-to-date instructions, evaluation rubrics, and other related material, please log in to TaskStream. You will not have access to these tasks in TaskStream until you requests them through your AAP and your mentor approves your request.

TaskStream TWA1 Task - Proposal

Topics

Review of Competencies

In completing this assessment, you have satisfied the TWA1 Technical Writing Competency.

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

You have learned much about proposing, planning, organizing, and presenting a project. These skills are directly transferable to the IT workplace. A well-done, thoughtful proposal lays the foundation for almost any project of meaning in an organization. The experience should impart to you the confidence to make a solid contribution in any project in which you are involved.

Next Steps: Proceed to the Capstone or the Portfolio

Have a conversation with your mentor about what comes next for you. Chances are it is either the portfolio or your capstone. Between the two of you, you will decide whether to tackle one, the other, or both.

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.