



Five Steps to Get Ready for the Acquia Certified Developer Exam



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This Guide is for Drupal 7 based examination

Introduction

“I want to get Acquia Certified. How do I prepare for the exam?” is a frequently asked question since the launch of the Acquia Certified Developer exam in March 2014.

Whether you are an expert Drupalist or a relatively new one, this guide will provide you with an insight into the nature of the exam, give you clear advice on how you can prepare, and provide some useful exam-taking tips.



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Steps to Prepare for the Exam

Let's take a look at five steps that will help ensure you are as prepared for the exam as possible.

Step 1. Understand the Goals

The Acquia Certified Developer exam is a high-stakes examination designed to validate medium- to advanced-level Drupal development skills.

This exam validates your ability to:

- Design, develop, and deploy Drupal-based solutions
- Understand the core Drupal basic architecture best practices for front- and back-end development
- Develop and maintain applications using Drupal front- and back-end development
- Develop and implement new Drupal modules and themes
- Customize and extend existing modules and themes

From the objectives, it's clear that the exam is not for novices. If you are relatively new to Drupal with less than six months of experience, you might reconsider whether you want to challenge yourself with this exam at this stage in your Drupal career. You probably would benefit from a few more months of experience on medium- to large-scale Drupal projects before tackling this exam.

If you have more than six months of experience on real-life Drupal projects, you should consider taking the exam—proceed to the next step!

Step 2. Understand the Exam Blueprint

The exam has 60 questions divided into four domains of essential knowledge that a Drupal developer needs to master.

Domain	% of Exam
1.0 Fundamental Web Concepts	10%
2.0 Site Building	30%
3.0 Front-end Development (Theming)	27%
4.0 Back-end Development (Coding)	33%

You need to have a good understanding of the three core Drupal domains: Site Building, Front-end Development, and Back-end Development to be ready for the exam.

If your Drupal work has focused on one or two of these domains, without knowledge, understanding, or experience in the others, you need to take time to learn the others.

Step 3. Understand the Nature of the Exam Questions

All the questions asked in the exam are scenario-based. Each question has three parts: a scenario, a question, and the choices. A scenario describes a situation with a use case or a client requirement on a Drupal site; the question is about the scenario or the problem; then four or more choices are presented as possible solutions from which you need to select the correct answer or answers. Take a look at a sample question:

Scenario

You are running a popular local news portal. A mobile app developer in your area approached you for permission to syndicate your content on their mobile app. They are requesting the content be made available as a feed rather than in HTML format.

Question

How can you provide a list of the latest articles in RSS format?

Choices

- Create a view with a Feed display filtering only the Articles content type.
- Create a view with a Page display filtering only the Articles content type, and enable the RSS filter under the filter options.
- Create a view with a Page display filtering only the Articles content type, and select RSS Feed instead of Unformatted List under the Style output options.
- Create a view with a Page display filtering only the Articles content type, modify the .tpl.php file for the view, and render the output in RSS format.

As you can see, the questions rely on the application of Drupal concepts and knowledge rather than purely memorizing the facts, code, or syntax.

Reading through long lists of documentation or books is not sufficient for answering most questions. You need experience with a number of use cases, applications, common scenarios in a Drupal project, and even support requests and issues to handle questions of this nature.

However, the appendixes contain links to resources to help you improve your skills and expand your knowledge.

Step 4. Assess Your Strengths and Weaknesses

Experienced Drupalists will likely know their weaknesses more than they know their strengths. You might have judged your own skill levels while reading the through the four domains listed in Step 2. It is quite natural for you to be more experienced and proficient in one domain than another. Also, within a domain, it is quite likely that you have hands-on experience on some topics but have never touched other areas within the same domain.

We suggest you perform a skills and expertise self-analysis with respect to the domains and topics listed in the blueprint. The blueprint lists test objectives (topics) for each domain. Rank your skills on a scale of 0 to 10 against each test objective (0 for absolutely zero knowledge or exposure and 10 for complete mastery). Use the “Acquia Certification Prep–Self-assessment” spreadsheet for carrying out your evaluation.

- Topics with 8+ score are your strengths.
- Topics with a score of 5 to 7 will require you to do some preparation.
- Topics below 5 will require you do a lot of preparation or guided instruction.

Step 5. Work on Areas of Weakness

Once you have a list of topics for which you need preparation, you will face two challenges:

- Finding and studying documentation and knowledge resources for the topics
- Finding enough practical case studies covering the topics from which to learn

Finding documentation and online resources is easier, thanks to Angela Byron (@webchick) and Tanay Sai (@saitanay). They have pulled together comprehensive lists of online resources for each topic or learning objective in the blueprint. (See Appendix A of this ebook for details.)

The second challenge—finding enough practical case studies covering the topics—is likely to be more daunting. Here are a few suggestions for the three core domains:

Site Building

Find case studies:

- Review several (3 to 5) Drupal 7 projects that you or your team have worked on in past year.
- Review the content types, field settings, display settings, vocabularies, blocks, menus, and views used on the sites.

Ask questions:

- Why are the configurations the way they are?
- What can be changed or improved?
- What are the issues or support requests raised by the client?
- What changes were made to the initial configurations and why?

Front-end development

Find case studies:

- Find custom themes developed by your team over last year.
- If possible, obtain the source designs or wireframes on which they were based.
- Review template, CSS, and JavaScript files.
- Review the preprocess functions implemented by the theme.

Ask questions:

- Is the theme implemented exactly per the designs? If not, what changes were needed and why?
- Are theme regions optimum? Is there any redundancy?
- Are there any theme settings?
- How are CSS and JavaScript files called in the theme?
- Are there any preprocess functions used? Why?

If you don't have access to themes developed by your team, you could examine a few contributed themes.

If you wish to sharpen your knowledge, you could try building a theme on your own.

Back-end development

If you have not worked on back-end development or module development, preparing for this could be challenging. Studying the code of modules developed by your team may or may not help, because the modules might be extremely complex or very specific to a use case. The exam expects that you have an overall understanding of Drupal's API, core hooks system, and their applications.

We suggest you attend a module development course and/or build a small module on your own to prepare for this domain. If you cannot attend a training program and are a self-learner, try the "Examples for Developers." This site provides highly documented, working code snippets for many of the Drupal APIs and concepts covered under Sections 4.1 and 4.2 of Appendix A.

Exam Tips

You can take the exam at an exam center in person, or you can take an online proctored exam.

As you take the exam:

- Don't rush! You have 90 minutes to answer your 60 questions.
- Attempt all the questions for which you are sure about first.
- The system allows you to save questions for review later. So if you're not sure of the answer right away, revisit the questions after you have attempted all the others.
- Don't overthink. Most of the times, the first answer that comes to mind tends to be the right one.
- There are no trick questions in the exam; take them at face value.
- When two answer choices look exactly the same, read them again.

If taking exam at an exam center...

- Reach the exam center at least 15 minutes before your scheduled time.
- Carry a printout of the e-mail you receive when you register online.
- Bring a photo id as proof of identification. For example, bring a passport or a driver's license, which are generally accepted proofs of identification in your country.
- Be aware of the exam center rules. The rules might be strict, especially about bringing your mobile phone or taking breaks during the exam.
- If you need to reschedule, do it online at least 24 hours prior to your scheduled time.
- Remember that the operators at the exam center are neither Drupalers nor Acquiains, they won't know anything about the exam or the certification.

If taking an online proctored exam:

Check the system requirements carefully by logging in to your account.

- Install necessary software at least one day before the scheduled exam time.
- Select a silent room or a silent corner of the office where no one and nothing will distract you for 90 minutes.
- Keep a bottle of water handy.
- Turn off your mobile devices and keep them far away from you.
- Don't use two monitors; use only your laptop/desktop's primary monitor. Keep an open mind....clear your caches

Endnote

Acquia is developing a Certification Preparation workshop. Follow @AcquiaCertified for updates about this program.

Disclaimer: This guide is intended to provide high-level direction and advice for preparing for Acquia Certified Developer Exam. Following the instructions in this guide does not guarantee success.

Appendix A: Links to Resources and Documentation

The resources listed for some of the domain topics in the following sections are freely available online, and organized according to the exam blueprint.

Domain 1.0: Fundamental Web Development Concepts

- 1.1. Demonstrate knowledge of HTML and CSS.
- 1.2. Identify PHP programing concepts.
- 1.3. Identify JavaScript and jQuery programing concepts.

Topic	Resources
Learning HTML, CSS, JavaScript, and PHP	https://developer.mozilla.org/en-US/docs/Web http://html5doctor.com/ http://www.webplatform.org/ http://css-tricks.com/ http://codepen.io/ http://php.net https://developer.mozilla.org/en-US/docs/Web/JavaScript http://api.jquery.com/
Overriding CSS from modules and themes	https://drupal.org/node/263967
Adding style sheets	https://drupal.org/node/171209
Adding styles through API functions	https://drupal.org/node/225868
Working with JavaScript in Drupal	https://drupal.org/node/121997
Drupal Javascript API	https://drupal.org/node/304258

1.4. Demonstrate using Git for version control.

- 1.1. Demonstrate knowledge of HTML and CSS.
- 1.2. Identify PHP programing concepts.
- 1.3. Identify JavaScript and jQuery programing concepts.

Topic	Resources
Git Tutorial on Atlassian	https://www.atlassian.com/git/tutorial
Common Git Workflows	https://www.atlassian.com/git/workflows

Domain 2.0: Site Building

- 2.1. Demonstrate ability to create and configure content types with appropriate fields and field settings for building basic data structures.
- 2.2. Demonstrate ability to configure field display and view modes for content types.
- 2.3. Demonstrate ability to create and use taxonomy vocabularies and terms for classification and organization of content.
- 2.4. Demonstrate ability to configure blocks for building layouts from information widgets.
- 2.5. Demonstrate ability to build main and alternative navigation systems by using menus.
- 2.6. Demonstrate ability to create and configure views for building content list pages, blocks, and feeds.

Topic	Resources
Working with content types and fields	https://drupal.org/documentation/modules/field-ui
Specifying how fields are displayed	https://drupal.org/node/774798
Adding stylesOrganizing content with taxonomies	https://drupal.org/documentation/modules/taxonomy
Working with blocks	https://drupal.org/documentation/modules/block
Working with menus	https://drupal.org/documentation/modules/menu
Working with views	https://drupal.org/documentation/modules/views

Domain 3.0: Front-end Development (Theming)

- 3.1. Demonstrate ability to create a custom theme or subtheme for a given scenario.
- 3.2. Demonstrate theming concepts knowledge.
- 3.3. Demonstrate ability to build or override PHP templates for defining layout content.
- 3.4. Demonstrate ability to use theme () functions for overriding custom output.
- 3.5. Demonstrate ability to write template preprocess functions for overriding custom output.

Topic	Resources
Theming section from “The Definitive Guide to Drupal 7”	http://themery.com/dgd7

Domain 4.0: Back-end Development (Coding)

4.1. Demonstrate ability to develop custom modules using Drupal API for extending Drupal functionality.

Topic	Resources
Drupal Examples Module	https://drupal.org/project/examples
Batch API	https://drupal.org/node/180528
Cache API	https://drupal.org/node/145279
Entity API	https://drupal.org/developing/api/entity/7
Field API	https://drupal.org/node/443536
File API	https://drupal.org/node/555118
Form API	https://drupal.org/node/37775
Queue API	https://api.drupal.org/api/drupal/modules!system!system.queue.inc/group/queue/7
Common core hooks	https://drupal.org/comment/3560674#comment-3560674

4.1. Demonstrate ability to develop custom modules using Drupal API for extending Drupal functionality.

Topic	Resources
General concepts of database API	https://drupal.org/node/310070
Static queries	https://drupal.org/node/310072
Dynamic queries	https://drupal.org/node/310075
Chaining in dynamic queries	https://drupal.org/node/1060924
Drupal schema entity relationship	https://drupal.org/files/er_db_schema_drupal_7.png

4.2. Demonstrate ability to work with Drupal's Database Abstraction Layer for managing tables and CRUD operations on data.

Topic	Resources
Troubleshooting overview	https://drupal.org/node/1925512
Common installation problems	https://drupal.org/documentation/install/troubleshoot
Accounts, permissions, and login issues	https://drupal.org/node/201871
Debugging WSODs (white screen of death)	https://drupal.org/node/201872
Common error messages in Drupal and their fixes	https://drupal.org/node/201875
Site configuration issues	https://drupal.org/node/201869

4.4. Demonstrate ability to write code using Drupal coding standards.

Topic	Resources
Drupal coding standards	https://drupal.org/coding-standards
Naming your modules, functions, and variables	https://drupal.org/node/299070

4.5. Demonstrate ability to analyze and resolve site performance issues arising from site configuration and custom code.

Topic	Resources
<i>High Performance Drupal</i> , Chapter 1, “Drupal Coding for Optimal Performance” By Jeff Sheltren, Narayan Newton, and Nathaniel Catchpole	http://chimera.labs.oreilly.com/books/1230000000845/ch01.html
Writing efficient code	https://drupal.org/node/328206
Drupal-based site caching	https://docs.acquia.com/articles/drupal-based-site-caching
Views caching	https://docs.acquia.com/articles/views-caching
Optimizing Drupal views the right way	https://www.silviogutierrez.com/blog/optimizing-drupal-views-right-way/
Caching to improve performance	https://drupal.org/node/326504
Tips and links for optimizing MySQL	https://drupal.org/node/85768
Tuning MySQL	https://drupal.org/node/51263
Tuning php.ini	https://drupal.org/node/2602

4.6. Demonstrate ability to analyze and resolve security issues arising from site configuration and custom code.

Topic	Resources
Writing secure code	https://drupal.org/writing-secure-code
Handling user input	https://drupal.org/node/101495
Preventing cross-site request forgery (CSRF) on your forms	https://drupal.org/node/178896
Writing secure queries in Drupal	https://drupal.org/node/101496
Handling text in a secure format	https://drupal.org/node/28984

Credits: These resources were originally compiled by Angela Byron (@webchick) and extended by Tanay Sai (@saitanay). Original lists can be found at:

<http://webchick.net/files/AcquiaCertificationStudyGuide.pdf>

<http://www.tanay.co.in/blog/cracking-acquia-drupal-certification.html>

Appendix B: Relevant Training Videos from Drupalize.Me

Drupalize.Me provides the most convenient way to learn Drupal by way of practical and accessible Drupal training videos from top-tier experts.

If you are an Acquia Network subscriber, you can get free or discounted access to Drupalize.Me services.

Following are relevant training videos from Drupalize.Me, organized by domain.

1.0 Fundamental Web Development Concepts

Video	Link
Controlling HTML markup with Views style settings	http://drupalize.me/videos/controlling-html-markup-views-style-settings
PHP for themers	http://drupalize.me/videos/php-themers
Introduction to Git	http://drupalize.me/series/introduction-git-series

2.0 Site Building

Video	Link
Building content types in Drupal 7	http://drupalize.me/videos/building-content-types-drupal-7
Intro to fields for site builders series	http://drupalize.me/series/intro-fields-site-builders-series
Entity view modes	http://drupalize.me/videos/entity-view-modes
Adding fields to a user profile and other entities	http://drupalize.me/videos/adding-fields-user-profile-and-other-entities
Using taxonomy	http://drupalize.me/videos/using-taxonomy
Categorizing content with a term reference field	http://drupalize.me/videos/categorizing-content-term-reference-field
Creating content silos	http://drupalize.me/videos/creating-content-silos
Working with blocks in Drupal 7	http://drupalize.me/videos/working-blocks-drupal-7
Create and place custom blocks	http://drupalize.me/videos/create-and-place-custom-blocks
Creating menus in Drupal 7	http://drupalize.me/videos/creating-menus-drupal-7
Working with secondary menus	http://drupalize.me/videos/working-secondary-menus
Create listing pages with views	http://drupalize.me/videos/create-listing-pages-views
Using views displays to create variations	http://drupalize.me/videos/using-views-displays-create-variations
Intro to views for Drupal 7 series	http://drupalize.me/series/intro-views-drupal-7-series

3.0 Front-end Development (Theming)

Video	Link
Theming basics for Drupal 7 series	http://drupalize.me/series/theming-basics-drupal-7-series
PSD to Drupal theme	http://drupalize.me/series/psd-drupal-theme
Advanced theming for Drupal 7 series	http://drupalize.me/series/advanced-theming-drupal-7-series
Customizing the page template file	http://drupalize.me/videos/customizing-page-template-file
Strategies for keeping template files clean	http://drupalize.me/videos/strategies-keeping-template-files-clean
Overriding theme functions	http://drupalize.me/videos/overriding-theme-functions-0
Creating a preprocess function for a theme function	http://drupalize.me/videos/creating-preprocess-function-theme-function
Altering variables with preprocess functions	http://drupalize.me/videos/altering-variables-preprocess-functions
Adding new variables with preprocess functions	http://drupalize.me/videos/adding-new-variables-preprocess-functions

4.0 Back-end Development (Coding)

Video	Link
Introduction to module development for Drupal 7	http://drupalize.me/videos/introduction-module-development-drupal-7
Drupal API documentation	http://drupalize.me/videos/drupal-api-documentation
An overview of the database layer in Drupal 7	http://drupalize.me/videos/overview-database-layer-drupal-7
Working with entities in Drupal 7	http://drupalize.me/series/working-entities-drupal-7
Quality assurance with Selenium	http://drupalize.me/videos/quality-assurance-selenium
Introduction to module development for Drupal 7	http://drupalize.me/videos/introduction-module-development-drupal-7
Performance changes in Drupal 7	http://drupalize.me/videos/performance-changes-drupal-7
Tips for writing secure code	http://drupalize.me/videos/tips-writing-secure-code
Adding SSL for secure HTTPS communications	http://drupalize.me/videos/adding-ssl-secure-https-communications

Appendix C: The BuildAModule (BAM) Guide to Acquia Certification

Because BuildAModule has been focused on dispensing practical Drupal learning for the last four years, we have a set of videos that map almost perfectly to the requirements of the Acquia certification. In addition to covering the broad topics, we also cover the in-between steps and concepts. From what we heard, questions on those in-between subjects are likely to emerge on the exam, so it could be a perfect fit, especially if you want to do some quick review.

Two guides to other online resources that you might find useful are Tanay's "Cracking Acquia Drupal Certification" that references mostly Drupal.org resources, and Webchick's "Study Guide."

Domain 1.0: Fundamental Web Development Concepts

1.1. Demonstrate knowledge of HTML and CSS.

Topic	Resources
Rapidly testing and adjusting CSS using Firebug	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-css-how-to-use-firebug-to-inspect-any-element
Hiding elements on a page	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-css-how-to-hide-breadcrumbs-or-any-other-element-using-css
Changing a background image	http://buildamodule.com/video/build-your-first-drupal-7-web-site-more-css-updates-and-troubleshooting-text-formats-how-to-add-a-repeating-background-image-to-the-footer
Sharpening HTML and CSS skills	www.w3schools.com/html/default.asp

1.1. Demonstrate knowledge of HTML and CSS.

Topic	Resources
PHP programming basics	http://buildamodule.com/collection/php-programming-basics
Object-oriented programming (OOP)	http://buildamodule.com/video/drupal-8-developer-prep-object-oriented-programming-basics-the-difference-between-procedural-and-object-oriented-programming

1.3. Identify JavaScript and jQuery programming concepts.

Topic	Resources
Working with JavaScript and jQuery	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-two-major-use-cases-for-jquery-and-javascript-and-what-this-video-covers
Adding JavaScript inline	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-use-drupal-add-js-to-add-inline-javascript-use-the-footer-and-store-settings
Adding JavaScript as external files	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-use-drupal-add-js-to-include-and-set-the-weight-of-javascript-files
Loading JavaScript dynamically	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-load-javascript-after-a-page-is-done-loading
Using jQuery selectors and events	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-use-jquery-selectors-and-events

[nt-core-concepts-how-to-work-with-javascript-and-jquery-how-to-use-jquery-selectors](#)

<http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-use-jquery-events-to-add-interactivity>

1.4. Demonstrate the use of Git for version control.

Topic	Resources
Understanding, installing, and using Git	<u>http://buildamodule.com/collection/change-management-and-version-control</u> <u>http://buildamodule.com/video/change-management-and-version-control-installing-git-and-working-on-the-command-line-how-to-install-git-on-windows-with-mysysgit</u> <u>http://buildamodule.com/video/change-management-and-version-control-staging-committing-and-undoing-in-git-introduction-to-version-control</u> <u>http://buildamodule.com/video/change-management-and-version-control-staging-committing-and-undoing-in-git-how-to-stage-and-unstage-files-and-what-staging-means</u> <u>http://buildamodule.com/video/change-management-and-version-control-deploying-releases-features-and-fixes-with-git-how-to-use-a-scalable-git-branching-model-called-gitflow</u> <u>http://buildamodule.com/video/change-management-and-version-control-how-to-version-control-the-database-overview-of-database-components-you-can-add-to-version-control</u>

Domain 2.0: Site Building

2.1. Demonstrate ability to create and configure Content Types with appropriate fields and field settings for building basic data structures.

Topic	Resources
Building your first Drupal 7 website	http://buildamodule.com/collection/build-your-first-drupal-7-web-site
Exploring how fields work	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-content-types-and-fields-how-fields-work-and-how-to-use-the-field-edit-form-to-change-a-field-title
Adding new fields	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-content-types-and-fields-how-to-add-a-new-field-to-a-content-type
Understanding the default field types	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-fix-broken-views-and-work-with-taxonomy-how-to-add-a-taxonomy-term-reference-field-to-a-content-type http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-use-term-and-node-reference-fields-adding-a-node-reference-field-and-updating-our-content http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-add-fields-to-a-view-and-work-with-the-date-module-how-to-add-and-configure-a-date-field http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-configure-content-type-settings-and-splitting-fields-between-types-how-to-add-a-fivestar-field-and-configure-voting-tags

2.2. Demonstrate ability to configure field display and view modes for content types.

Topic	Resources
Hiding a field title with field display settings	http://buildamodule.com/video/build-your-first-drupal-7-web-site-working-with-custom-blocks-and-image-styles-how-to-hide-a-field-label-on-a-node-display-page
Understanding view modes	http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-use-display-suite-for-grouping-fields-and-positioning-content-an-overview-of-the-two-methods-to-group-fields-in-a-display-view-modes-and-the-views-module
Choosing the correct view mode for the right context	http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-use-display-suite-for-grouping-fields-and-positioning-content-how-to-choose-the-correct-view-mode-for-a-particular-context
Modify and adding new view modes with the Display Suite module	http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-use-display-suite-for-grouping-fields-and-positioning-content-how-to-enable-editing-view-modes-and-adding-a-custom-view-mode-with-display-suite

2.3. Demonstrate ability to create and use taxonomy vocabularies and terms for classification and organization of content.

Topic	Resources
Understanding taxonomy	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-fix-broken-views-and-work-with-taxonomy-a-brief-explanation-of-taxonomy
Adding new vocabularies and terms	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-fix-broken-views-and-work-with-taxonomy-how-to-add-a-taxonomy-vocabulary-with-terms

2.4. Demonstrate ability to configure Blocks for building layouts from information widgets.

Topic	Resources
What are blocks and what are their roles	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-blocks-and-permissions-what-blocks-and-regions-are-and-how-to-use-the-blocks-administration-page
How to identify, enable, and configure blocks	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-blocks-and-permissions-how-to-hide-the-user-login-and-powered-by-drupal-blocks
How to add new block	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-blocks-and-permissions-how-to-enable-a-menu-block-and-hide-a-block-title
How to configure a block's visibility	http://buildamodule.com/video/build-your-first-drupal-7-web-site-working-with-custom-blocks-and-image-styles-how-to-add-a-custom-block
How to arrange blocks with Context and Panels modules	http://buildamodule.com/collection/advanced-site-building-in-drupal-7 http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-use-the-context-module-for-positioning-content-how-the-context-module-works-and-how-to-create-a-context http://buildamodule.com/video/advanced-site-building-in-drupal-7-how-to-use-panels-for-positioning-content-why-panels-is-so-powerful-and-potentially-intimidating

2.5. Demonstrate ability to build main and alternative navigation systems by using menus.

Topic	Resources
Working with the menu listing page	http://buildamodule.com/video/build-your-first-dupal-7-web-site-how-to-work-with-menus-modules-and-webform-how-to-work-with-the-menu-listing-page
Adding and positioning new menu items	http://buildamodule.com/video/build-your-first-dupal-7-web-site-how-to-work-with-menus-modules-and-webform-how-to-enable-edit-and-move-a-menu-item
Adding secondary menus	http://buildamodule.com/video/build-your-first-dupal-7-web-site-how-to-work-with-blocks-and-permissions-how-to-add-a-log-in-menu-item-to-the-user-menu
Adding menus as blocks	http://buildamodule.com/video/build-your-first-dupal-7-web-site-how-to-work-with-blocks-and-permissions-how-to-enable-a-menu-block-and-hide-a-block-title

2.6. Demonstrate ability to create and configure views for building content list pages, blocks and feeds.

Topic	Resources
Understanding the Views module	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-pathauto-and-introduction-to-views-what-the-views-module-is-for-and-how-to-install-it
Creating a calendar-style list of events	http://buildamodule.com/video/build-your-first-drupal-7-web-site-how-to-work-with-pathauto-and-introduction-to-views-filling-out-the-add-view-wizard
Display a single piece of related content with a block	http://buildamodule.com/video/advanced-site-building-in-drupal-7-advanced-views-how-to-fill-in-the-views-wizard-to-create-a-block
Exploring contextual filters and relationships	http://buildamodule.com/video/advanced-site-building-in-drupal-7-advanced-views-how-contextual-filters-work-in-the-views-module http://buildamodule.com/video/advanced-site-building-in-drupal-7-advanced-views-how-relationships-work-in-views-and-how-to-add-a-referencing-entity-relationship

Domain 3.0: Front-end Development (Theming)

3.1. Given a scenario, demonstrate ability to create a custom theme or sub theme.

Topic	Resources
Creating a theme or sub-theme from scratch	http://buildamodule.com/video/drupal-theming-essentials-how-to-build-and-modify-a-drupal-theme-or-sub-theme-how-to-create-a-theme-folder-add-an-info-file-and-enable-a-custom-theme http://buildamodule.com/video/drupal-theming-essentials-how-to-build-and-modify-a-drupal-theme-or-sub-theme-part-2-how-to-create-a-sub-theme

3.2. Demonstrate knowledge of theming concepts.

Topic	Resources
Understanding theming	http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-who-these-theming-videos-are-for-and-what-they-do-and-do-not-cover http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-what-is-the-difference-between-designing-theming-and-coding-and-why-do-they-overlap-so-much
Modifying the output of Drupal and choosing the best method for each scenario	http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-what-are-all-of-the-different-ways-to-modify-drupal-output http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-how-to-determine-which-method-to-use-when-modifying-output
Exploring the conventions for view modes, field formatters, and template files	http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-what-view-modes-are-and-why-you-would-use-them http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-what-field-formatters-are-and-how-to-use-them-to-modify-field-output http://buildamodule.com/video/drupal-theming-essentials-important-drupal-theming-concepts-template-file-coding-standards-and-conventions

3.3. Demonstrate ability to build or override PHP templates for defining layout content.

Topic	Resources
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Naming, structuring, and overriding a template file

<http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-why-use-template-files-how-file-suggestions-work-and-setting-up-for-later-examples>

<http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-how-template-file-suggestions-work-in-depth-and-adding-new-suggestions>

3.4. Demonstrate ability to use theme () functions for overriding custom output.

Topic	Resources
Creating and overriding theme functions	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-to-and-manipulate-the-theme-layer-how-to-implement-a-theme-function-and-how-the-theme-registry-works http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-how-to-override-a-theme-function

3.5. Demonstrate ability to write template pre-process functions for overriding custom output.

Topic	Resources
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Creating a preprocessing function on the modular level or in a theme

<http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-to-and-manipulate-the-theme-layer-how-to-use-preprocessing-functions>

<http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-how-to-use-simple-preprocessing-functions>

Naming preprocessing functions to work with templates or theme functions

<http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-how-to-name-preprocessing-functions-to-use-with-theme-functions-and-template-files>

<http://buildamodule.com/video/drupal-theming-essentials-template-files-theme-function-overrides-and-preprocessing-functions-how-to-apply-preprocessing-code-only-in-certain-situations>

Domain 4.0: Back-end Development (Coding)

4.1. Demonstrate ability to develop Custom Modules using Drupal API for extending Drupal functionality.

Topic	Resources
Drupal 7 Development Core Concepts collection	http://buildamodule.com/collection/drupal-7-development-core-concepts
Creating a basic module	http://buildamodule.com/video/drupal-7-development-core-concepts-welcome-to-module-building-setting-up-the-module-folder
Using common utility functions	http://buildamodule.com/video/drupal-7-development-core-concepts-development-tips-and-tricks-using-url-and-l-to-generate-urls-and-links
Working with the Form API	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-build-and-manipulate-forms-with-the-form-api-the-benefits-of-using-the-form-api
Working with the Menu system	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-and-manipulate-pages-with-the-menu-system-how-the-menu-system-works
Working with the Database API	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-what-is-the-database-api
Working with the Node API	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-nodes-introduction-to-the-node-api
Working with the User system	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-users-what-this-video-covers-and-a-preview-of-the-final-module

Working with the theme layer	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-to-and-manipulate-the-theme-layer-how-the-theme-layer-helps-designers-and-coders-work-together
Adding JavaScript and CSS files	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-javascript-and-jquery-how-to-include-a-javascript-file-on-every-page-and-intro-to-the-jquery-object http://buildamodule.com/video/drupal-theming-essentials-how-to-build-and-modify-a-drupal-theme-or-sub-theme-how-to-add-a-css-file

4.2. Demonstrate ability to work with Drupal's Database Abstraction Layer for managing tables and CRUD operations on data.

Topic	Resources
Understanding what the Database Abstraction Layer does	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-what-is-the-database-api
Building the module schema with the Schema module	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-how-to-use-table-schemas-and-a-description-of-the-schema-module

Using INSERT, DELETE, and SELECT in the Database API	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-how-to-write-an-insert-query-with-the-database-api http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-how-to-write-a-delete-query-with-the-database-api http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-how-to-write-a-static-select-query-with-the-database-api
Writing a dynamic SELECT query	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-how-to-write-a-dynamic-select-query-and-easily-paginate-a-result-set
Using hook_update_N() to keep module databases up to date	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-work-with-the-database-using-hook-update-n-to-add-a-new-table

4.3. Demonstrate ability to debug code and troubleshoot site problems.

Topic	Resources
Using Xdebug to inspect variables and stop code execution	http://buildamodule.com/video/drupal-6-development-and-tools-testing-and-debugging-a-module-how-to-use-a-php-debugger-in-drupal
Searching BAM for help troubleshooting and fixing errors	http://buildamodule.com/search/troubleshoot

4.4. Demonstrate ability to write code using Drupal Coding Standards.

Topic	Resources
Reviewing “Overview of Coding Standards” to ensure your code uses best practices	http://buildamodule.com/video/drupal-7-development-core-concepts-overview-of-coding-standards-why-coding-standards-are-useful-and-important http://buildamodule.com/video/drupal-7-development-core-concepts-overview-of-coding-standards-working-with-white-space http://buildamodule.com/video/drupal-7-development-core-concepts-overview-of-coding-standards-using-operators http://buildamodule.com/video/drupal-7-development-core-concepts-overview-of-coding-standards-writing-good-comments http://buildamodule.com/video/drupal-7-development-core-concepts-overview-of-coding-standards-working-with-arrays

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4.5. Demonstrate ability to analyze and resolve site performance issues arising from site configuration and custom code.

Topic	Resources
Improving performance using include files	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-and-manipulate-pages-with-the-menu-system-how-to-use-include-files-to-improve-performance-and-next-steps

4.6. Demonstrate ability to analyze and resolve security issues arising from site configuration and custom code.

Topic	Resources
Avoiding the most common mistakes and how to resolve them	http://buildamodule.com/collection/drupal-7-development-core-concepts
Using string filtering functions	http://buildamodule.com/video/drupal-7-development-core-concepts-welcome-to-module-building-setting-up-the-module-folder
Setting proper access control	http://buildamodule.com/video/drupal-7-development-core-concepts-development-tips-and-tricks-using-url-and-l-to-generate-urls-and-links
Working securely with the database	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-build-and-manipulate-forms-with-the-form-api-the-benefits-of-using-the-form-api
Understanding how permissions and roles work and what control in Drupal core that each permission provides	http://buildamodule.com/video/drupal-7-development-core-concepts-how-to-add-and-manipulate-pages-with-the-menu-system-how-the-menu-system-works
Setting up roles using best practices	http://buildamodule.com/video/advanced-site-building-in-drupal-7-formatting-a-blog-entry-page-why-to-use-multiple-roles-with-fewer-permissions-and-why-our-import-fails

