American Public University System

The Ultimate Advantage is an Educated Mind

Department of Information Technology
ENTD261 Scripting Languages for the Administrator: JS, VBS, WS, and Perl
3 Credit Hours
8 Weeks
Prerequisite(s): None

<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor Information</td>
</tr>
<tr>
<td>Course Description</td>
</tr>
<tr>
<td>Course Scope</td>
</tr>
<tr>
<td>Course Objectives</td>
</tr>
<tr>
<td>Course Delivery Method</td>
</tr>
<tr>
<td>Course Resources</td>
</tr>
</tbody>
</table>

Instructor Information

Instructor:
Email:

Course Description (Catalog)

This course introduces the scripting languages necessary in custom programming for server administration and security purposes. Introductory level programming will be covered using JavaScript, VBScript, Windows Shell Script, and Perl Scripting languages. Previous programming experience is recommended. Prerequisite: None.

Course Scope
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

This course builds upon an introductory level programming foundation (in any procedural or object-oriented programming language) that a student is encouraged to already have obtained prior to enrolling in this course. In this course, students will be introduced to the JavaScript, VBScript, Windows Shell Script, and Perl Scripting languages. Students will learn basic programming skills in each of these languages. The intention of this course is to introduce students to the use of these languages for server administration and security purposes. Programming examples and assignments will involve simple scripts run at the Windows command prompt or run in compilers that the student can download and install for free. There will be accompanying forum discussions on how these programming skills would be applied for server administration and security purposes.

Course Objectives

After successfully completing this course, you will be able to:

- Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods.
- Identify, apply, code, test, and debug basic programming skills using JavaScript scripting language.
- Identify, apply, code, test, and debug basic programming skills using VBScript scripting language.
- Identify, apply, code, test, and debug basic programming skills using Windows Shell scripting language.
- Identify, apply, code, test, and debug basic programming skills using Perl Shell scripting language.
- Compare and contrast scripting languages in determining the most suitable language to use for coding custom procedures for server administration and security reporting.

Course Delivery Method

This course delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due by Sunday evening of the week as noted and include Forum questions (accomplished in groups through a threaded forum), examination, and individual assignments submitted for review by the Faculty Member). Assigned faculty will support the students throughout this eight-week course.
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Resources

Required Course Textbooks


***Note: The chapters entitled "Saturday Afternoon," "Saturday Evening," and "Sunday Morning" in the JavaScript book will not be covered in this course since those chapters focus on web programming instead of server programming. We will skip those chapters.


***Note: The chapters entitled "Saturday Afternoon" and "Saturday Evening" in the VBScript book will not be covered in this course since those chapters focus on web programming instead of server programming. We will skip those chapters.


Required Readings

Embedded in each week’s Lessons will be links to the chapters of the e-book(s) that you are required to read that week.

Additional Resources


STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Web Sites

In addition to the required course texts, the following public domain web sites are useful. Please abide by the university’s academic honesty policy when using Internet sources as well. Note web site addresses are subject to change.

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Web Site URL/Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA Formatting and Style Guide</td>
<td><a href="http://owl.english.purdue.edu/owl/resource/560/01/">http://owl.english.purdue.edu/owl/resource/560/01/</a></td>
</tr>
</tbody>
</table>

Table of Contents

Evaluation Procedures

This course requires disciplined independent practice and individual completion of assignments. Although Distance Learning provides you with a flexible schedule to meet your professional, personal, and academic responsibilities, you are expected to follow the syllabus and submit assignments on time and on schedule. Assignments, quizzes, and initial forum posts may be submitted up to one week late, but will lose 5 points per day late. Follow-up posts will not receive any credit if posted after the due date. After one week past the due date, assignments, quizzes, and forum posts may not be submitted for credit. All work must be submitted by the end of the class session. No assignments will be accepted after the class end date.

Reading Assignments

Each week, you will be assigned chapters from the class textbook to read. You will be evaluated on your understanding of the material in your readings through your forum contributions, assignments, quizzes, and final project. In order to grasp the weekly course objectives and participate fully in the discussions, it is highly recommended that you read each week’s assigned reading chapters before participating in the week’s forum discussion, taking your quizzes, and completing your weekly assignments.

Supplemental Readings

Students are encouraged to research weekly topics on the Internet and use their research findings in their forum posts and weekly assignments to support their points.

Forum Participation

Each week you will be expected to participate in a class discussion on the forum. Each week’s discussion questions can be found on the forum itself. Each one of you will have different and unique experiences and points of view related to the topics that we are learning each week, and we can all learn from each other by sharing our thoughts and ideas together on the forum. Your participation in the forums unleashes the power of synergy in our classroom. To facilitate this interaction, please be prompt when posting your forum work for each week, allowing time for the others to actively engage in the dialogue.
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Forum Timing: Although the due date for both your initial post, with your answers to the week’s questions, and your two follow-up posts is 11:55 PM ET on Sunday, you are encouraged to post your initial post no later than Thursday, to allow time for your classmates to read and reply to your post. Be sure to read all of the follow-up posts to your own posts and reply to any questions or requests for clarification. You are encouraged to conduct research and use other sources to support your answers.

Forum Guidelines:

- Try to post your initial response to each forum by 11:55 PM ET on Thursday each week.
- Initial responses should be no less than 250 words.
- Do not include my questions or discussion prompts in your post. You may number your answers, but your post should contain only your own original writing.
- Write in complete sentences and full paragraphs and avoid using lists of any kind in your posts.
- Your initial post must be original in content and demonstrate a thorough analysis of the topic.
- Include your own personal experience related to the topic being discussed. If you do not have previous experience with scripting languages and server programming, describe the experiences you are currently having with learning scripting languages while working on your assignments, or the experiences you have had as a computer user who has benefited from custom scripts developed by the server administrators of the network you use on your job, if applicable.
- Write in your own words and avoid copying and pasting from other websites.
- If you do quote from a source, keep quotations to a minimum – I would rather see you express your own understanding of what you learned from your sources, in your own words.
- Include a citation at the bottom of your post, indicating the source(s) you consulted in your personal research into the topic being discussed each week.
- Reply to at least 2 of your classmates in each forum by 11:55 PM ET on Sunday each week.
- Replies to classmates should be no less than 150 words each.
- For practical reasons, when you respond to other learners’ posts, please start your response by referencing their name.
- Responses to classmates must be significant in content, to advance the discussion forward. Your responses should add additional insight to the discussion or challenge your classmates’ opinions.
- You are encouraged to log into the classroom several times each week to participate in the class discussion on the forum.
- Refer to the forum and the Rubric for Grading Forum Posts below for more details on grading. Forum postings are a significant part of your grade and I will be looking for quality and depth in your participation in the weekly forum discussions.

Assignments

You will have assignments due each week. Detailed instructions for each weekly assignment can be found in the Assignments area of the classroom.

Final Project

You will have a Final Project due at the end of Week 8. Detailed instructions for the final project can be found in the Assignments area of the classroom.

Standards for Original Work:
**STUDENT WARNING:** This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

**All work submitted must be original work.** Incidents of academic dishonesty will result in you failing the assignment, and repeat incidents will result in failing the course. I check forum posts and assignments regularly for incidents of plagiarism and academic dishonesty. Please read and understand the University policy on academic dishonesty ([Plagiarism Policy](#)). When writing about ideas learned from your sources, you must summarize the ideas in your own words (rather than using direct quotations from your sources). Be sure to provide appropriate citations and references on your forum posts and assignments to give credit to your sources for the ideas you are paraphrasing and writing about, even though you will not be directly quoting from your sources.

**Evaluation Criteria:**

<table>
<thead>
<tr>
<th>Grade Instruments</th>
<th>Weight in % (Percent of Final Grade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Discussion Forums (all weighted equally)</td>
<td>20</td>
</tr>
<tr>
<td>Weekly Assignments (all weighted equally)</td>
<td>35</td>
</tr>
<tr>
<td>Quizzes (3)</td>
<td>30</td>
</tr>
<tr>
<td>Final Project</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Rubric for Grading Forum Posts:**

<table>
<thead>
<tr>
<th>Synthesis of concepts</th>
<th>Applications of personal experience</th>
<th>Clear citations</th>
<th>Writing standards</th>
<th>Rubric for Response to Two or More Students</th>
<th>Timeliness</th>
</tr>
</thead>
</table>
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

<table>
<thead>
<tr>
<th>Synthesized concepts in 250 or more words (critical to class performance). The response refers to course materials and shows a clear understanding of main ideas and concepts. There are no irrelevant comments and the information is on point. Ideas are clearly and properly organized.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The response provides personal examples that tie in with the course material being discussed. Reflection is evident and clearly ties in with the material presented. Insight was provided to some concept.</td>
</tr>
<tr>
<td>The response made proper reference to the course text or to other materials that were referenced or referred to in the discussion. Opinions were also included and were valid.</td>
</tr>
<tr>
<td>The writing is grammatically correct, clear and concise. The response is well formulated and easy to read and understand. Correct terminology was used when needed.</td>
</tr>
<tr>
<td>Responded to two or more students in 150 words or More. The other learner’s ideas, questions, concerns were addressed. The response referenced reading or lecture materials when needed. The response addressed the learner’s feelings if needed. There were no irrelevant or off-point comments. The posting reflects a clear understanding of the other learner’s ideas.</td>
</tr>
<tr>
<td>The posting was “not” submitted on time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>40%</th>
<th>20%</th>
<th>10%</th>
<th>10%</th>
<th>20%</th>
</tr>
</thead>
</table>

Table of Contents

8 – Week Course Outline

Please see the Student Handbook to reference the University’s grading scale.
### Course Syllabus

**STUDENT WARNING:** This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Goals</th>
<th>Textbooks</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 2    | Microsoft Windows Shell Scripting, Continued  
- Variables  
- Conditional Logic  
- Loops | Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods.  
Identify, apply, code, test, and debug basic programming skills using Windows Shell scripting language. | MWSS: Ch. 4-5 |  
- Week 2 Forum  
- Assignment 2 |
| 3    | Microsoft Windows Shell Scripting, Continued  
- Procedures and Subroutines  
- Debugging  
- Error Handling | Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods.  
Identify, apply, code, test, and debug basic programming skills using Windows Shell scripting language. | MWSS: Ch. 6-8 |  
- Week 3 Forum  
- Assignment 3 |
| 4    | JavaScript  
- JavaScript Basics  
- JavaScript and the Windows Script Host | Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods.  
Identify, apply, code, test, and debug basic programming skills using JavaScript scripting language. | JS: “Fri. Eve.: Introducing JavaScript and JScript” & “Sat. Morn.: Learning the Basics of JavaScript Coding” |  
- Week 4 Forum  
- Assignment 4 |
| 5    | JavaScript, Continued  
- JavaScript and the Windows Script Host, Continued  
- Using JavaScript to Automate Windows | Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods.  
- Week 5 Forum  
- Assignment 5 |
| 6    | Visual Basic Script | Explore, identify, apply, and test | VBS: “Fri. Eve.: ” |  
- Week 6 Forum |
**STUDENT WARNING:** This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Description</th>
<th>Assignment</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 7    | Visual Basic Script, Continued | • Explore, identify, apply, and test basic programming concepts including logical process, algorithms, universal data types, command structures, conditional statements, loops, and methods. <br> • Identify, apply, code, test, and debug basic programming skills using VBScript scripting language. | • VBS: “Sun. Aft.” & “Sun. Eve.” | • Week 7 Forum  
• Assignment 7 |
|      | Working with Files and Folders |  |  |  |
|      | Desktop, Computer, and Network Automation |  |  |  |
| 8    | Perl Programming Basics | • Identify, apply, code, test, and debug basic programming skills using Perl Shell scripting language. <br> • Compare and contrast scripting languages in determining the most suitable language to use for coding custom procedures for server administration and security reporting. | • Perl: Ch. [##] | • Week 8 Forum  
• Final Project |

MWSS = Microsoft Windows Shell Scripting Programming for the Absolute Beginner  
*JS = Learn JavaScript in a Weekend*  
**VBS = Learn VBScript in a Weekend**  
Perl = Perl Programming for the Absolute Beginner

*Note:* The chapters entitled "Saturday Afternoon," "Saturday Evening," and "Sunday Morning" in the JavaScript book will not be covered in this course since those chapters focus on web programming instead of server programming. We will skip those chapters.  
**Note:** The chapters entitled "Saturday Afternoon" and "Saturday Evening" in the VBScript book will not be covered in this course since those chapters focus on web programming instead of server programming. We will skip those chapters.

Table of Contents

Policies
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Please see the Student Handbook to reference all University policies. Quick links to frequently asked question about policies are listed below.

- Drop/Withdrawal Policy
- Plagiarism Policy
- Extension Process and Policy
- Disability Accommodations

Writing Expectations
All written submissions should be submitted in a font and page set-up that is readable and neat. It is recommended that students try to adhere to a consistent format, which is described below.

- Typewritten in double-spaced format.
- Arial or Times New Roman font style.
- 11 or 12-point font size.
- Page margins Top, Bottom, Left Side and Right Side = 1 inch.

Written assignments and essays should include a title page with the following information:

- Student’s Full Name
- Professor’s Name
- Course ID and Section
- Date

Important Note: All written submissions, including forum posts and assignments, must be written in your own words. Material should never be directly copied from the Internet or from any other sources. All writing must be in complete sentences and paragraphs. Do not use lists in your forum posts or written essays.

Citation and Reference Style
Attention Please: Students will follow the APA Citation Style as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the 6th edition of the APA Publication Manual.

There are many good references for APA Citation Style freely available on the web. One such resource is the APA Formatting and Style Guide provided by the Purdue Online Writing Lab. Click on the links on the left-hand menu to view the various examples of In-Text Citations and Reference List examples:

http://owl.english.purdue.edu/owl/resource/560/01/

Late Assignments
Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. As adults, students, and working professionals, I understand you must manage competing demands on your time. Should you need additional time to complete an assignment, please contact me before the due date so we can discuss the situation and
STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

determine an acceptable resolution. Routine submission of late assignments is unacceptable and may result in points deducted from your final course grade. If arrangements have not been approved in advance, all late work will be subject to standard late penalties. **Assignments, quizzes, and initial forum posts may be submitted up to one week late, but will lose 5 points per day late.** Follow-up posts will not receive any credit if posted after the due date. After one week past the due date, assignments, quizzes, and forum posts may not be submitted for credit.

**Netiquette**

Online universities promote the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and “flaming.” Such activity and the loss of good manners are not acceptable in a university setting – basic academic rules of good behavior and proper “Netiquette” must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the Forum of others.

- **Technology Limitations:** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The Sakai classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- **Humor Note:** Despite the best of intentions, jokes and especially satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add “emoticons” to help alert your readers: ;-) :), 😊

**Disclaimer Statement**

Course content may vary from the outline to meet the needs of this particular group.

---

**Online Library**

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search engines on the open Web. In addition, the Online Library provides access to special learning resources, which the University has contracted to assist with your studies. Questions can be directed to librarian@apus.edu.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors’ publication, and services to search and borrow research books and articles from other libraries.
- **Electronic Books:** You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- **Electronic Journals:** The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Tutor.com:** AMU and APU Civilian & Coast Guard students are eligible for 10 free hours of tutoring provided by APUS. Tutor.com connects you with a professional tutor online 24/7 to
STUDENT WARNING:  This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

provide help with assignments, studying, test prep, resume writing, and more. Tutor.com is tutoring the way it was meant to be. You get expert tutoring whenever you need help, and you work one-to-one with your tutor in your online classroom on your specific problem until it is done.

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. The following are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name, or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOCI111), or class name.

If a guide you need is not available yet, please email the APUS Library: librarian@apus.edu.

Turnitin.com

Written assignments submitted in the classroom will automatically be evaluated for potential plagiarism using Turnitin. Turnitin will analyze the paper and report instances of potential plagiarism and issues with academic integrity. It is expected that all writing assignments, including forum posts, will be your own original writing. Similarity to your sources, including any direct quotations from your sources, may not exceed 5%.

Selected Bibliography

Additional references are found in the Lessons area of the classroom, embedded in the weekly lessons.