**Syllabus for the Switching, Routing and Wireless Essentials course**

**Week 1** Connecting to a network device using a console cable (console) and as a terminal device (SSH)

**Week 2** Basic Device Configuration

Labs at school:

1.1.7 Lab - Basic Switch Configuration

1.6.2 Lab - Configure Basic Router Settings

Homeworks:

3.2.8 Packet Tracer - Investigate a VLAN Implementation

3.3.12 Packet Tracer - VLAN Configuration

3.4.5 Packet Tracer - Configure Trunks

3.4.6 Packet Tracer - Configure VLAN and Trunking – Physical Mode

3.5.5 Packet Tracer – Configure DTP

**Week 3** Switching Concepts, VLAN

Labs at school:

3.4.6 Lab - Configure VLANs and Trunking

3.6.1 Lab - Implement VLANs and Trunking

Homeworks:

4.2.7 Packet Tracer - Configure Router-on-a-Stick Inter-VLAN Routing

4.3.8 Packet Tracer - Configure Layer 3 Switching and Inter-VLAN Routing

4.4.8 Packet Tracer - Troubleshoot Inter-VLAN Routing

4.4.9 Packet Tracer – Troubleshoot Inter-VLAN Routing – Physical Mode

4.5.1 Packet Tracer - Inter-VLAN Routing Challenge

**Week 4** Inter-VLAN Routing

Labs at school:

4.2.8 Lab - Configure Router-on-a-Stick Inter-VLAN Routing

4.4.9 Lab - Troubleshoot Inter-VLAN Routing

4.5.2 Lab - Implement Inter-VLAN Routing

Homeworks:

5.1.9 Packet Tracer - Investigate STP Loop Prevention

6.2.4 Packet Tracer - Configure EtherChannel

6.3.4 Packet Tracer - Troubleshoot EtherChannel

6.4.1 Packet Tracer - Implement Etherchannel

Test Modules 1 - 4: Switching Concepts, VLANs, and InterVLAN Routing Exam

**Week 5** STP, EtherChannel

Labs at school:

6.4.2 Lab - Implement Etherchannel

Homeworks:

7.2.10 Packet Tracer - Configure DHCPv4

7.4.1 Packet Tracer - Implement DHCPv4

Test Modules 5 - 6: Redundant Networks Exam

**Week 6** DHCP v4, SLAAC, DHCP v6

Labs at school

7.4.2 Lab - Implement DHCPv4

8.5.1 Lab - Configure DHCPv6

Homeworks:

příprava na SRWE Practice PT Skills Assessment (PTSA) - Part 1

**Week 7** SRWE Practice PT Skills Assessment (PTSA) - Part 1

Homeworks:

9.3.3 Packet Tracer - HSRP Configuration Guide

9.3.4 Packet Tracer - HSRP Configuration Guide

test Modules 7 - 9: Available and Reliable Networks Exam

**Week 8** FHRP Concepts

Labs at school:

11.6.2 Lab - Switch Security Configuration

Homeworks:

11.1.10 Packet Tracer - Implement Port Security

11.6.1 Packet Tracer - Switch Security Configuration

13.1.10 Packet Tracer - Configure a Wireless Network

13.2.7 Packet Tracer - Configure a Basic WLAN on the WLC

**Week 9** LAN Security Concepts, Switch Security Configuration

Labs at school:

13.1.11 Lab - Configure a Wireless Network

Homeworks:

13.3.12 Packet Tracer - Configure a WPA2 Enterprise WLAN on the WLC

13.4.5 Packet Tracer - Troubleshoot WLAN Issues

13.5.1 Packet Tracer - WLAN Configuration

13.5.2 Packet Tracer – Wirelwss Technology Exploration – Physical Mode

Test Modules 10 - 13: L2 Security and WLANs Exam

**Week 10** WLAN Concepts, IP Static Routing

Labs at school:

15.6.2 Lab - Configure IPv4 and IPv6 Static and Default Routes

Homeworks:

14.3.5 Packet Tracer - Basic Router Configuration Review

test Modules 14 - 16: Routing Concepts and Configuration Exam

**Week 11** Routing Concepts, IP Static Routing

Labs at school:

16.3.2 Lab - Troubleshoot IPv4 and IPv6 Static and Default Routes

Homeworks:

15.6.1 Packet Tracer - Configure IPv4 and IPv6 Static and Default Routes

16.3.1 Packet Tracer - Troubleshoot Static and Default Routes

16.3.2 Packet Tracer - Troubleshoot IPv4 and Ipv6 Stat. and Def. Routers – Physical Mode

**Week 12** Troubleshoot Static and Default Routes

**SRWE Practice PT Skills Assessment (PTSA) - Part 2**

**Week 13**

**Final Exam**