



## ITS POLICIES AND GUIDELINES

CATEGORY: Information Technology

STATUS: **In Review**

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**POLICY TITLE:** **Wireless Network Connectivity Policy**

**POLICY PURPOSE:**

Truman State University provides secure wireless access to computing and information technology (IT) resources for employees, students, contractors, and guests as part of the services offered to enhance productivity in the workplace. Wireless networks operate within a shared and finite radio spectrum, and are important to the University. To help ensure that wireless products can function properly, Information Technology Services needs to protect the spectrum as a shared resource.

**APPLIES TO:**

This policy covers all wireless data communication devices connected to any of Truman's internal networks (data or voice) or any form of wireless communication device capable of transmitting packet data or analog signals. Wireless devices and/or networks without any connectivity to Truman networks do not fall under the purview of this policy, unless they interfere with the reliable operation of the campus wireless network.

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**CONTENTS:**

- Importance of Spectrum Management
- Spectrum Management
- Approved Frequency Bands

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**POLICY STATEMENT:**

***Importance of Spectrum Management***

It is through the spectrum between 800 MHz and 5.9 GHz that the University can:

- connect laptops and personal devices to the campus network
- talk on cellular phones, cordless phones, and headsets
- secure buildings with security cameras

Unless properly managed, many of these technologies will crowd the spectrum and negatively impact network services. Because the spectrum is a shared resource, the need to monitor, manage, and secure it is imperative to optimal wireless reliability and performance.

***Spectrum Management***

Information Technology Services will manage the spectrum to ensure fair and efficient allocation of resources. Ensuring availability requires the careful management of traffic and the minimizing of interference in the RF (radio frequency) environment.

Management of the spectrum includes the following:

- All wireless access points connected to the Truman network must be approved and configured by ITS prior to connection to the network.
- Any departmental request for wireless coverage must be made to ITS a minimum of 90 days prior to the required coverage date.

- All individual requests for wireless access will be made in accordance with guidelines published by ITS on the wireless network page.
- Cordless telephones used on campus should be in the 900MHz band as cordless phones in the 2.4 GHz band will interfere with segments of the 802.11x wireless network.
- If ITS discovers a device causing interference, the department has the right to shut down the device until a resolution can be reached.
- ITS will periodically survey the spectrum, catalog the devices affecting it, and take action accordingly.
- ITS reserves the right to grant, limit, or restrict access to the wireless spectrum within the physical spaces and on grounds owned and operated by Truman State University.

### **Approved Frequency Bands**

The following table lists the industry-approved frequency bands for devices such as cordless phones, cell phones, scanners, etc.

<b>Frequency Range</b>	<b>Band/Region</b>		<b>Devices</b>
800 MHz	Cell	<b>Cell</b>	Cellular phones and devices
865-870 MHz	Europe ISM		Cordless phones, UHF-RFID, SCATA, wireless video
902-928 MHz	ISM		Cordless phones, UHF-RFID, SCATA, wireless video
950-956 MHz	Japan-ISM		Cordless phones, UHF-RFID, SCATA, wireless video
1850-1910 MHz	Cell		Cellular phones and devices
1880-1900 MHz	DECT-ETSI		European DECT cordless phones
1920-1930 MHz	UPCS-U.S.		U.S.-to DECT V.6
2.400-2.500 GHz	ISM		Cordless phones, Wi-Fi, Bluetooth, ZigBee, alarm systems, motion detectors, and others
2.5 GHz +	WiMAX		
3.1 GHz	UWB	<b>UWB</b>	UWB-Ultra Wideband applications currently approved for 3.1-10.1 GHz
4.94-4.99 GHz	U.S.-to public safety		U.S. and others
5.155.35 GHz	ISM/UWB		Wi-Fi-802.11a, video cameras, others
5.475.35 GHz	ISM/UWB		ETSI approved for use in Wi-Fi, soon to be FCC to approved; also contains radar, microwave links
5.7255.875 GHz	ISM/UWB		Wi-Fi, cordless phones, video, Hyper to LAN
10.1 GHz	UWB		UWB applications currently approved for 3.1-10.1 GHz

**EXCLUSIONS OR SPECIAL CIRCUMSTANCES:**

Any exceptions to this Policy must be approved in writing by Information Technology Services (see contact information below).

**CONSEQUENCES:**

By failing to abide by this policy or policy procedures, individuals may be subject to sanctions, up to and including the loss of computer or network privileges, disciplinary action, suspension, termination of employment, dismissal from the University, and legal action. Some violations may constitute criminal offenses under local, state, and federal laws. The University will carry out its responsibility to report such violations to the appropriate authorities.

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**CONTACTS:**

**Responsible Executive:** Provost and Vice President for Academic Affairs  
**Responsible Office:** Information Technology Services  
**Contact:** Chief Information Officer  
111 McClain  
660-785-4163

**APPROVED BY:** President, Truman State University

**APPROVED ON:** 2013/XX/XX

**EFFECTIVE ON:** 2013/XX/XX

**REVIEW/CHANGE HISTORY:** 2003/11/23, 2009/11/01, 2011/02/03

**REVIEW CYCLE:** Annual

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**DEFINITIONS:**

**ITS** – Information Technology Services

**802.11x** – the wireless standards currently utilized in Truman's wireless network.

**Access Point** - communication hub (commonly referred to as a wireless router) for users of a wireless device to connect to a wired network

**RELATED DOCUMENTS:**

**KEYWORDS:**