ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)

All proposals MUST have their originating college faculty body (Ex. Arts & Sciences, Education and Nursing; Technical Sciences) **approval and must be signed by the submitter and the college dean before being submitted to the Academic Senate Secretary.**

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers Academic Senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --
http://www.msun.edu/admin/provost/asproposals.htm
Documentation and forms for the curriculum process is also available on the web page:
http://www.msun.edu/admin/provost/asforms.htm

*****(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Dean of the submitting college who then notifies the originator.)**

Proposal # 08-11 **Title:** Combining the old 335 + 435 into one course.
(proposal explanation, submitter and college dean signatures on attached program/degree or course revision form)

	Date				
Received by ACAD Senate	12-22-08				
Forwarded to Teacher Ed Council	_____	Approved	_____	Disapproved	_____
		Signature			Date
Forwarded to Gen Ed Committee	2/6/09	Approved	✓	Disapproved	_____
		Signature			Date
Returned to ACAD Senate	2-19-09				
Forwarded to Curriculum Committee	2-20-09	Approved	✓	Disapproved	_____
		Signature			Date
Returned to ACAD Senate for Vote	3-5-09	Approved	✓	Disapproved	3-27-09
		Signature			Date
Sent to Provost's office for Full Faculty vote	_____				
Voted on at Full Faculty meeting	_____	Approved	_____	Disapproved	_____
		Signature			Date
Forwarded to Provost for Approval/Disapproval	3-30-09	Approved	_____	Disapproved	_____
		Signature			Date
Forwarded to Chancellor for Approval/Disapproval	_____	Approved	_____	Disapproved	_____
		Signature			Date
Copies sent to originating college and registrar's office	_____				

Updated 09/29/05

COURSE REVISION FORM

NEW ____ X ____ MAJOR REVISION _____ FOR INFORMATION ONLY ____

College _Technical Sciences_ Program Area _Computer Information Systems___ Date _10-08

Submitter _____ Chair/Dean _____ Date 10.22.08

Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Combing the old 335 and 435 into one course.

Please provide the following information:

College:	**Technical Sciences**
Program Area:	**Computer Information Systems**
Date:	Oct-08
Course Prefix & No.:	**CIS 4xx**
Course Title:	Network Routing and Security
Credits:	3
Required by:	Computer Information Systems BS
Selective in:	
Elective in:	
General Education:	
Lecture:	**X**
Lecture/Lab:	
Gradable Lab:	
Contact hours lecture:	3
Contact hours lab:	

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):
This course will continue on the network course. It will include using routers. The students will see why and when to use routers and they will hook them up in the lab. It will provide a basic overview of routing. Security policy will be covered including common threats and attacks and the technologies that can address network security issues. It also covers installation, configuration and basic troubleshooting of security solutions. Students will be required to successfully install and configure equipment in a pre-determined lab environment. *Junior/Senior in CIS, EET; completion of CIS 300 and CIS 360 or similar courses*

Course Outcome Objectives:

General Knowledge

- Why We Need Routers
- Router basics
- Why We Need Security
- Review security basics
- Identify the features and benefits of security products
- Install, configure, and manage an Embedded Firewall (EFW)
- Design and troubleshoot a EFW network
- List steps to install, configure and manage a hardware Firewall, Software firewall and a VPN Firewall
- List steps to install, configure and manage a VPC Review security basics
- Identify the features and benefits of security products
- Design and troubleshoot a EFW network
- List steps to install, configure and manage a VPN
- Locking Down Services for More Effective Security
- Operating System Add-ons
- Disabling and Removing Unnecessary Services
- Controlling Specific Services, Including FTP, Telnet, and HTTP
- Scanning and Protecting Shares

Encryption Techniques

- Encryption and Internetworking
- Encryption in Enterprise Networks
- Understanding Trust Relationships
- Symmetric Key Encryption
- Public Key Encryption
- One-Way Encryption
- Data Encryption Standard
- Working with Digital Certificates
- SSL Encryption and Web Servers
- Use Pretty Good Privacy (PGP) to Sign a Document
- Deploying S/MIME
- Public Key Infrastructure (PKI) vs Certificate Authority (CA)
- Encryption Protocols and System Performance

Intrusions and Attacks

- Intrusion Threats
- Scanning Attacks
- Detecting a NIC in "Promiscuous Mode"
- Sniffing Attacks, Including Sniffing E-Mail, Telnet, NFS, NIS, And Web Traffic
- E-Mail Bombing
- Scanning and Cracking a Share
- System Bug-Based Attacks
- Causes and Results of a Denial of Service (DOS) Attacks
- Defining and Conducting Buffer Overflow Attacks
- How to Protect Your Operating Systems, Routers, and Equipment Against Physical Attacks
- Brute Force Attack
- Dictionary Attack
- Social Engineering
- Understanding Key Logging
- Identifying Trojans
- Describe the Effects of a Worm
- Three Virus Types (Boot Sector, Macro, File Attaching)
- IP Spoofing

Security Components

- Identifying and Implementing Security Policies

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.