### Course and Program Development: IMPACT AND APPROVAL SIGNATURES

**See Course and Program Development Policy and Procedures (www.ubalt.edu/provost) for instructions.**

**SCHOOL:**  
- LAW  
- MSB  
- CAS  
- CPA

**CONTACT NAME:** C. Wright Brown/M. Ketel  
**PHONE:** 410-837-5004/5278

**DEPARTMENT/DIVISION:** Division of Science, Information Arts and Technologies  
**DATE PREPARED:** 3/18/12

**PROPOSED SEMESTER OF IMPLEMENTATION:**  
- fall  
- spring  
**YEAR:** 2013

**TYPE OF ACTION:**  
- add (new)  
- deactivate  
- modify  
- other

**LEVEL OF ACTION:**  
- noncredit  
- undergraduate  
- graduate  
- other

**ACTION BEING REQUESTED**  
(Select one category, either Course Actions or Program Actions):

- **COURSE ACTIONS**
  - Original Subject Code/Course Number: COSC 307
  - Original Course Title: Administering and Supporting a Network Operating System

- **PROGRAM ACTIONS**
  - Original Program Title:

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

<table>
<thead>
<tr>
<th>COURSE ACTIONS</th>
<th>PROGRAM ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Experimental Course</td>
<td>10. Program Requirements</td>
</tr>
<tr>
<td>2. Course Title</td>
<td>11a. Undergraduate Specialization (24 credits or fewer)</td>
</tr>
<tr>
<td>3. Course Credits</td>
<td>11b. Master's Specialization (12 credits or fewer)</td>
</tr>
<tr>
<td>4. Course Number</td>
<td>11c. Doctoral Specialization (18 credits or fewer)</td>
</tr>
<tr>
<td>5. Course Level</td>
<td>12. Minor (add or delete)</td>
</tr>
<tr>
<td>✓ 6. Pre- and Co-Requisite</td>
<td>13. Closed Site Program</td>
</tr>
<tr>
<td>✓ 7. Course Description</td>
<td>14. Program Suspension</td>
</tr>
<tr>
<td>8. New Course</td>
<td>15. Program Reactivation</td>
</tr>
<tr>
<td>9. Deactivate Course</td>
<td>16a. Certificate Program (UG/G) exclusively within existing degree program</td>
</tr>
<tr>
<td>22. Other</td>
<td>16b. Certificate Program (UG/G) outside of or across degree programs (12 or more credits)</td>
</tr>
</tbody>
</table>

**ADDITIONAL DOCUMENTATION**  
(check all appropriate boxes of documents included; review the list of necessary documents):

- ☑ summary proposal (O)  
- ☑ course definition document (P)  
- ☑ full five-page MHEC proposal (Q)

- ☑ financial tables (MHEC) (R)  
- ☑ other documents as may be required by MHEC/USM (S)  
- ☑ other (T)
IMPACT REVIEW (review the list of necessary signatures):

<table>
<thead>
<tr>
<th>Impacted Entity</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ no impact</td>
<td>□ impact statement attached</td>
<td></td>
</tr>
<tr>
<td>b. OTS</td>
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</tr>
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<td>□ no impact</td>
<td>□ impact statement attached</td>
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</tr>
<tr>
<td>c. University Relations</td>
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<tr>
<td>□ no impact</td>
<td>□ impact statement attached</td>
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<tr>
<td>d. Admissions</td>
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<td>□ no impact</td>
<td>□ impact statement attached</td>
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<td>e. Records</td>
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<tr>
<td>□ no impact</td>
<td>□ impact statement attached</td>
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</tbody>
</table>

APPROVAL SEQUENCE (review the list of necessary signatures):

<table>
<thead>
<tr>
<th>Approval Level</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Department/Division (Chair)</td>
<td>[Signature]</td>
<td>7/24/12</td>
</tr>
<tr>
<td>B. General Education (for No. 7, 8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Final Faculty Review Body Within Each School (Chair)</td>
<td>[Signature]</td>
<td>12/4/12</td>
</tr>
<tr>
<td>D. Dean</td>
<td>[Signature]</td>
<td>11/9/13</td>
</tr>
<tr>
<td>E. University Faculty Senate (Chair)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| F. University Council (Chair)

1 University Council review (for recommendation to the president or back to the provost) shall be limited to curricular or academic policy issues that may potentially affect the University's mission and strategic planning, or have a significant impact on the generation or allocation of its financial resources.
Document O: Course and Program Development: SUMMARY PROPOSAL

See Course and Program Development Policy and Procedures (www.ubalt.edu/provost) for instructions.

SCHOOL: [ ] LAW  [ ] MSB  [ ] CAS  [ ] CPA

CONTACT NAME: C. Wright Brown/M. Ketel  PHONE: 410-837-5004/5278

DEPARTMENT/DIVISION: Division of Science, Information Arts and Technologies  DATE PREPARED: 3/18/12

PROPOSED SEMESTER OF IMPLEMENTATION:  [ ] fall  [ ] spring  YEAR: 2013

ACTION BEING REQUESTED (select one category, either Course Actions or Program Actions):

[ ] COURSE ACTIONS  [ ] PROGRAM ACTIONS

Original Subject Code/Course Number:

COSC 307

Original Course Title: Administering and Supporting a Network Operating System

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

### COURSE ACTIONS
1. Experimental Course
2. Course Title
3. Course Credits
4. Course Number
5. Course Level
6. Pre- and Co-Requisite
7. Course Description
8. New Course
9. Deactivate Course
10. Other

### PROGRAM ACTIONS
10. Program Requirements
11a. Undergraduate Specialization (24 credits or fewer)
11b. Master’s Specialization (12 credits or fewer)
11c. Doctoral Specialization (18 credits or fewer)
12. Minor (add or delete)
13. Closed Site Program
14. Program Suspension
15. Program Reactivation
16a. Certificate Program (UG/G) exclusively within existing degree program
16b. Certificate Program (UG/G) outside of or across degree programs (12 or more credits)
17. Off-Campus Delivery of Existing Programs
18a. Undergraduate Concentration (exceeds 24 credits)
18b. Master’s Concentration (exceeds 12 credits)
18c. Doctoral Concentration (exceeds 18 credits)
19. Program Title Change
20. Program Termination
21. New Degree Program
22. Other

For changes to existing courses:

| OLD TITLE | Administrating and Supporting a Network Operating System | SUBJECT CODE/COURSE NO. | COSC 307 | CREDITS | 3 |
| NEW TITLE | Administrating and Supporting a Network Operating System | SUBJECT CODE/COURSE NO. | COSC 312 | CREDITS | 3 |
DESCRIBE THE REQUESTED COURSE/PROGRAM ACTION (additional pages may be attached if necessary):

This request is to change the course number and revise the course description for COSC 307, Administering and Supporting a Network Operating System to COSC 312, Administering and Supporting a Network Operating System. This course will be a required course for students pursuing an Applied Information Technology (AIT) degree who are on the network and systems administration track. This revision would reflect the transition from the existing 2 year AIT transfer program of study to the proposed 4 year AIT program curriculum.

The current description is as follows:

COSC 307, Administering and Supporting a Network Operating System
The sequel to COSC 305. Topics include setting up user and group accounts; securing network resources; setting up and administering network printers; auditing resources and events; monitoring network resources; backing up and restoring data; managing system policies, file systems, partitions and fault tolerance; interoperating between network operating systems; implementing network clients and directory replication; and troubleshooting. Laboratory fee required. Prerequisite: COSC 305.

The recommended description is as follows:

COSC 312, Administering and Supporting a Network Operating System

See attached Document P for new description

SET FORTH THE RATIONALE FOR THIS PROPOSAL:

The change in number and description would reflect the synergy of the established methods and learning tools associated with COSC 307 with an emphasis on current software installation, set-up and configuration, interoperating between network operating systems and trends in computer operating systems. We are changing the number to provide a more logical sequence for the tracks.
1. DATE PREPARED
March 16, 2012

2. PREPARED BY
Cecelia Wright Brown/Mohammed Ketel

3. DEPARTMENT/DIVISION
Division of Science, Information Arts and Technologies

4. COURSE NUMBER(S) with SUBJECT CODE(S)
COSC 312

5. COURSE TITLE
Administering and Supporting a Network Operating System

6. CREDIT HOURS
3

7. CATALOG DESCRIPTION
Prepares students to install, configure, administer and troubleshoot the current version of Microsoft Windows Server network operating system. Topics include setting up user and group accounts; securing network resources; auditing resources and events; monitoring network resources; backing up and restoring data; managing system policies, file systems and fault tolerance; interoperating between network operating systems; implementing network clients and directory replication; managing/implementing disaster recovery; and troubleshooting. Lab fee required. prerequisite: COSC 310

8. PREREQUISITES
Prerequisites: COSC 310

9. COURSE PURPOSE (how the course is to be used in the curriculum; e.g., required for the major, elective, etc.)
Required course for Applied Information Technology Program

10. GENERAL EDUCATION AREA (if applicable; e.g., social sciences, humanities, mathematics, etc.)
Not Applicable

11. COURSE TYPE/COMPONENT (clinical, continuance, discussion, field studies, independent study, laboratory, lecture, practicum, research, seminar, supervision, thesis research, tutorial or workshop; this must match PeopleSoft 9.0 coding, so check with your dean's office if you are unsure of the correct entry)
Lecture

Summer 2010
12. FACULTY QUALIFIED TO TEACH COURSE

Cecelia Wright Brown and Mohammed Ketel

13. CONTENT OUTLINE

(1) Introduction
- Understand client systems and key features
- Identify important general features and planning a networking model
- Understand and implement networking protocols
- Set-up and installation of service packs, configuring deployment services and initial task configurations

(2) Configuring and Management
- How to use manager tools, distributed file system
- Configuring hardware, operating system, the registry, security and shells
- Basic active directory concepts, managing user accounts, security groups, object management and implementing new features
- Installing and configuring printer properties
- Storage options, disk management tool, storage fault tolerance, back-up and recovery strategies
- Troubleshooting implementation and strategies

(3) Deploying
- Directory certificate services and information services
- Remote access services, virtual private network and terminal services
- Virtualization and virtual machines
- Application deployment, resource manager and load balancing clusters

(4) Securing
- Security enhancements, policies, active directory rights management services, Analysis snap-ins, encryption, network address translation, firewalls and network access protection

(5) Monitoring
- Monitor services and how to solve problems
- Task manager, performance monitor, data collector sets and reliability monitor
- Emergency Management Services, shadow copies, failover clustering, event viewer, network connectivity, remote desktop and administration tools

14. LEARNING GOALS
Upon completion of the course students will be able to:

- Install and configure a current version of Windows Server NOS
- Manage and configure users, groups, profiles, and policies
- Troubleshoot installation problems
- Manage effective permissions to ensure secure access to network resources
- Maintain a secure Windows Operating System through patching and security policies
- Install, configure and troubleshoot networking hardware, protocols and services
- Monitor and optimize network performance using Windows Server tools
- Implement, monitor and troubleshoot security
- Manage, monitor and optimize system performance
- Describe new Windows Server Virtualization features
- Demonstrate knowledge in security concepts, communication security, and infrastructure security

15. ASSESSMENT STRATEGIES
Methods of student assessment include: exams, laboratory exercises, drills, individual or group research assignments and projects

16. SUGGESTED TEXT(S) and MATERIALS (e.g. textbooks, equipment, software, etc., that students must purchase)
1) MCITP Guide to Microsoft Windows Server 2008, Server Administrator
By: Michael Palmer, ISBN: 9781423902386
Copyright: 2011, Publisher: Course Technology, Cengage Learning

Summer 2010
17. SPECIAL GRADING OPTIONS (if applicable)

N/A

18. SUGGESTED CLASS SIZE

20

19. LAB FEES (if applicable)

Lab fee required.

19. LAB FEES (if applicable)

$45 per course

Laboratory fees cover additional instructional costs incurred in the operation of computer laboratories necessary for teaching these courses and for students' preparation of classwork, including maintenance and routine upgrades to software and hardware, as well as the renewal of yearly software licenses.