## PROPOSAL SUMMARY AND ROUTING FORM

**Proposal Title:** Information Systems Management - Minor Curriculum Clean-up

Initiating Unit or Individual: Jim Jones  
Contact Person’s Name: Jim Jones e-mail: JamesJones@ferris.edu phone: (231) 591-3148  
Date or Term of Proposal Implementation: Spring 2010

- Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor
- Group I - B – New minors or concentrations
- Group II - A – Minor curriculum clean-up and course changes
- Group II - B – New Course
- Group III - Certificates
- Group IV – Off-Campus Programs

<table>
<thead>
<tr>
<th>Group/Individual</th>
<th>Signature</th>
<th>Date</th>
<th>Vote/Action *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Faculty</td>
<td></td>
<td></td>
<td>3 Support</td>
</tr>
<tr>
<td>Department Faculty</td>
<td>Jim Jones</td>
<td>4/21/09</td>
<td>4 Support</td>
</tr>
<tr>
<td>Department Head</td>
<td>James Wirth</td>
<td>4/21/09</td>
<td>7 Support</td>
</tr>
<tr>
<td>College Curriculum Committee</td>
<td>Anita Fagerman</td>
<td>5/21/09</td>
<td>9 Support</td>
</tr>
<tr>
<td>Dean</td>
<td></td>
<td>3/15/09</td>
<td>9 Support</td>
</tr>
<tr>
<td>University Curriculum Committee</td>
<td>Leonard Johnson</td>
<td>1/21/10</td>
<td>9 Support</td>
</tr>
<tr>
<td>Senate</td>
<td>Richard Johnston</td>
<td>1/21/10</td>
<td>9 Support</td>
</tr>
<tr>
<td>Academic Affairs</td>
<td>Donald Duffin</td>
<td>1/21/10</td>
<td>9 Support</td>
</tr>
</tbody>
</table>

* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.

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To be completed by Academic Affairs

President (Date Approved)  Board of Trustees (Date Approved)  President’s Council (Date Approved)
1. Proposal Summary

Recent reports have emphasized the growing risk to business and government information assets, and the corresponding growing demand for workers trained in the various aspects of information assurance (high level strategic risk management) and information security (tools and tactics to implement that strategy). For example, see:

- Bureau of Labor Statistics: "Workers with formal education or experience in information security, for example, are currently in demand because of the growing use of computer networks, which must be protected from threats." (http://www.bls.gov/oco/ocos287.htm)
- The Boston Globe: " Hackers used to create viruses and infiltrate them into others' computers all by themselves. This used to be about ego. No more. Now it's a business." (http://www.boston.com/news/local/massachusetts/articles/2009/03/15/in_a_word_worry?mode=PF)

Recent discussions with industry and government contacts (e.g., Auto Owners, Amway, Cyveillance, DFAS, NSA) have corroborated this growing risk and corresponding demand. These discussions also served to identify the need for specific knowledge, skills, and abilities within the broader domain of information assurance and information security. These specific needs are: understanding the risk management approach to information assurance/security, hands-on experience with the tools and tactics used to implement an information security blueprint, experience planning, executing, and interpreting network penetration tests, and understanding the financial aspects of an organization and how it relates to information systems, information assurance, and information security.

Accordingly, we propose the following changes to the Masters of Information Systems Management program:

1. Add a course to address finance for information systems managers: MISM 630 Financial Management. This will increase the minimum required credit hours from 33 to 36.
2. Modify the description, title, and outcomes of MISM 661 “Principles of Information Security Management” (to “Information Security/Assurance”) to better reflect the needs of industry, government, and other potential employers.
3. Modify the description, title, and outcomes of MISM 662 “Advanced Network Security” (to “Network Penetration Testing”) to better reflect the needs of industry, government, and other potential employers.
4. Modify MISM 662 prerequisite from MiSM 670 to MISM 661, reflecting the modification in course outcomes.

2. Summary of All Course Action Required*

a. Newly Created Courses to FSU

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISM</td>
<td>630</td>
<td>Financial Management</td>
</tr>
</tbody>
</table>

b. Courses to be Deleted From FSU Catalog:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Existing Course(s) to be Modified:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISM</td>
<td>661</td>
<td>Principles of Info Security</td>
</tr>
<tr>
<td>MISM</td>
<td>662</td>
<td>Advanced Network Security</td>
</tr>
</tbody>
</table>

d. Addition of existing FSU courses to program

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. Removal of existing FSU courses from program

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Proposed Checksheet

**Master of Science in Information Systems Management Check Sheet for**

## Ten Core Courses Required

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMBA 601</td>
<td>Professional Skills Development</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 610</td>
<td>Database Management and Administration</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 629</td>
<td>Legal and Ethical Issues in Business</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 630</td>
<td>Financial Management</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMBA 640</td>
<td>Project Management</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 661</td>
<td>Information Security/Assurance</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 665</td>
<td>Management Information Systems</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 670</td>
<td>Network Management &amp; Design</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 740</td>
<td>Business Intelligence <em>(prerequisite MISM 610)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 799</td>
<td>Integrated Capstone Project <em>(prereq final semester or dept approval)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Two Elective Courses Required

( Electives for the MS-ISM degree may be selected in combination with core courses to complete Advanced Studies Certificates offered by the College of Business)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISM 646</td>
<td>Systems Integration <em>(prerequisite MISM 610 &amp; MMBA 665)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 659</td>
<td>Application Development <em>(prerequisites MISM 610)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 662</td>
<td>Network Penetration Testing <em>(prerequisite MISM 661)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 671</td>
<td>Advanced Network Management &amp; Design <em>(prerequisite MISM 670)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 680</td>
<td>Current Topics in Information Systems Management</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMBA 615</td>
<td>Quality Improvement Principles and Applications</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMBA 705</td>
<td>Business Process Reengineering</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMBA 750</td>
<td>Process and Value Stream Management Systems</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ten Core Courses Required:** 30

**Two Elective Courses Required:** 6

**Total:** 36

A grade of C or better is required for a class to count toward the MS degree. Students must maintain an overall GPA of 3.0 or better to avoid dismissal from the MS-ISM program. An overall GPA of 3.0 or better is required to earn the MS degree.

## MS-ISM Program Concentrations/Advanced Studies Certificates

### Assn - Advanced Studies Certificate in Security & Networking – 12 Credits

The *Security & Networking* certificate is designed to prepare individuals with both theoretical and practical experience in designing and protecting local area networking systems, incorporating principles of information security, incident detection/reaction, and computer forensic tools and techniques (ranging from the servers to personal digital assistants).

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISM 661</td>
<td>Information Security/Assurance</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 662</td>
<td>Network Penetration Testing <em>(prerequisite MISM 661)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 670</td>
<td>Network Management &amp; Design</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 671</td>
<td>Advanced Network Management &amp; Design <em>(prerequisite MISM 670)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal:** 12

### Assn - Advanced Studies Certificate in E-Business and Systems Integration – 12 Credits

The *E-Business and Systems Integration* certificate is designed to prepare individuals to select and determine information systems components, applications, database design and development, web application design and development, and to acquire the skills to develop and implement e-business applications.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
<th>Term</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISM 610</td>
<td>Database Management and Administration</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 646</td>
<td>Systems Integration <em>(prerequisite MISM 610 &amp; MMBA 665)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 659</td>
<td>Application Development <em>(prerequisites MISM 610)</em></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISM 665</td>
<td>Management Information Systems</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal:** 12

## MS-ISM Specialty Programs and Concentrations

**Master of Business Administration (MBA) Concentrations**

MS-ISM students may select the Advanced Studies Certificate in Management Tools & Techniques (ASTT) from the MBA program.
Five-year BS Accounting degree and MS-ISM toward CPA
Junior year Bachelor of Science in Accountancy program majors may apply for fourth and fifth year dual enrollment in Accountancy MS-ISM. Successful students earn their Bachelors, Masters, and satisfy the 150 minimum credit hours required to practice as a licensed Certified Public Accountant (CPA).

Master of Science Nursing (MSN) Concentrations
MS-ISM students who hold a RN license may select a 12 hour concentration from the MSN program. MSN students may select a 12 hour Informatics Certificate from the MS-ISM.
FORM B

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.

2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the department. This response will be in writing and be included in the proposal following the consultation form.

RE: Information Systems Management - Minor Curriculum Clean-up and new course

Initiator(s): Jim Jones
Proposal Contact: Jim Jones Date Sent: 4/21/09
Department: COB - AFIS Campus Address: IRC 222

Responding Department: Nursing
Chair/Head/Coordinator: Marietta Bell-Scriber Date Returned: 4/22/09

Based upon department faculty review on ___(date), we

☒ Support the above proposal.
☐ Support the above proposal with the modifications and concerns listed below.
☐ Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.
FORM B

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.

2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

   Failure to respond is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the department. This response will be in writing and be included in the proposal following the consultation form.

RE: Information Systems Management - Minor Curriculum Clean-up and new course

Initiator(s): Jim Jones

Proposal Contact: Jim Jones  Date Sent: 4/21/09

Department: COB - AFIS  Campus Address: IRC 222

Responding Department: Management

Chair/Head/Coordinator: David Steenstra  Date Returned: 4/28/09

Based upon department faculty review on 4/28/09, we

☑ Support the above proposal.
☐ Support the above proposal with the modifications and concerns listed below.
☐ Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

On 4/28/09 Jim Jones presented a modified Form E for the proposed MISM 630 Financial Management to the MBA program faculty. The modifications renamed the course to MISM 630 Financial Management for Information Systems Managers, and defined several areas within the course that would emphasize financial management as they relate to IS/IT managers, thus differentiating it substantially from the MMBA 606 course which was of initial concern.
FLITE SERVICES CONSULTATION FORM

To be completed by the liaison librarian and approved by the Dean of FLITE. All returned forms should be included in the proposal. FLITE must respond within 20 calendar days of receipt of this form to insure that the form is included in the final proposal.

FAILURE TO RESPOND IS CONSIDERED AS SUPPORT OF THE CHANGE.

RE: Information Systems Management - Minor Curriculum Clean-up and new course

Projected number of students per year affected by proposed change: 50

Initiator(s): Jim Jones
Proposal Contact: Jim Jones Date Sent: 4/21/09
Department: COB - AFIS Campus Address: IRC 222
(Please print)

Liaison Librarian Signature: ___________________________ Date: ____________
Dean of FLITE Signature: ___________________________ Date Returned: ____________

Based upon our review on ____________ (date), FLITE concludes that:

☐ Library resources to support the proposed curriculum change are currently available.

☐ Additional Library resources are needed but can be obtained from current funds.

☐ Support, but significant additional Library funds/resources are required in the amount of $__________.

☐ Does not support the proposal for reasons listed below.

Comment regarding the impact this proposal will have on library resources, collection development, programs, etc. Use additional pages if necessary.
FORM E

NEW COURSE INFORMATION FORM

Course Identification:
Prefix: MISM  Number: 630834 Title: Financial Management for Information Systems Managers

Course Description:
Students examine budgets and financial information from an IS/IT managerial perspective. The course includes discussion of basic financial statements and formulas and tools used for evaluating business financial issues. Financial tools and techniques are applied to situations commonly encountered by IS/IT managers. Also included is a discussion of the non-financial issues related to making business decisions (i.e., the balanced scorecard).

Course Outcomes and Assessment Plan:
Discuss the influence of qualitative and quasi-quantitative factors in making business decisions.
Assessment: Given a corporate profile, students will demonstrate use of the balanced scorecard to assess non-financial influences on a business model.
Evaluate actions occurring in financial and general business situations from an ethical perspective.
Assessment: Through on-line research, students will examine and report on misuses and/or manipulation of financial information for a company.
Interpret a company’s performance using financial statement analysis tools.
Assessment: Given a set of corporate financial statements students will utilize various ratio analysis tools to evaluate the strengths and weaknesses revealed.
Perform an in depth analysis of managerial accounting concepts and utilize managerial accounting tools to make decisions common to IS/IT managers.
Assessment: Research paper or interview with managerial accountants and an IS/IT analysis project
Assess the role of budgets and budgeting, including capital investment and budgeting, in organizations and describe the way that organizations effectively use and interpret these tools.
Assessment: Research paper or interview relating to IS/IT issues.
Analyze and select appropriate situations for using activity-based costing for IS/IT projects or operations.
Assessment: Short project and/or examination
Estimate and be able to articulate the cost of IS/IT projects and quality.
Assessment: Cost/benefit analysis project.

Course Outline including Time Allocation:

<table>
<thead>
<tr>
<th>Course Outcome</th>
<th>Time Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss the influence of qualitative and quasi-quantitative factors in making business decisions.</td>
<td>15.00%</td>
</tr>
<tr>
<td>Evaluate actions occurring in financial and general business situations from an ethical perspective.</td>
<td>10.00%</td>
</tr>
<tr>
<td>Interpret a company’s performance using financial statement analysis tools.</td>
<td>30.00%</td>
</tr>
<tr>
<td>Assess the significant differences between managerial and financial accounting and the role that managerial accounting plays in decision making for manufacturing, service, not-for-profit, and governmental organizations.</td>
<td>15.00%</td>
</tr>
<tr>
<td>Analyze and select appropriate situations for using activity-based costing for IS/IT projects and operations.</td>
<td>10.00%</td>
</tr>
<tr>
<td>Assess the role of budgets and budgeting, including capital investment and budgeting, in organizations and describe the way that organizations effectively use and interpret these tools.</td>
<td>10.00%</td>
</tr>
<tr>
<td>Estimate and be able to articulate the cost of IS/IT projects and quality.</td>
<td>10.00%</td>
</tr>
</tbody>
</table>
I. ACTION TO BE TAKEN: CREATE A NEW COURSE
Notes
1. Complete each item in Section I and Section II.
2. If this course is to be used as a prerequisite for other university courses, Form Fs that reflect the prerequisite change must be submitted for those courses as well.

Term Effective (6 digit code only): 201001 Examples: 200801(Spring), 200805(Summer), 200808(Fall)
Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix: MISM
b. Number: 634

c. Enter Contact Hours per week in boxes.
   LECture 3 LAB INDependent Study -- Check (x) □
   Practicum: □ Seminar: □

d. Course Title: Financial Mgt for IS Managers (Limit to 30 characters/spaces.)

e. College Code: COB f. Department Code: AFIS

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: □ Variable □ Fixed
   h. Minimum Credit Hours 3 i. Maximum Credit Hours 3

j. May Be Repeated for Added Credit: Check (x) □ Yes □ No

k. Levels: Check (x) □ Undergraduate □ Graduate □ Professional

l. Grade Method: Check (x) □ Normal Grading □ Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) □ Yes □ No

n. Equivalent course: Prefix □ Number □ See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.
   Students examine budgets and financial information from an IS/IT managerial perspective. The course includes discussion of basic financial statements and formulas and tools used for evaluating business financial issues. Financial tools and techniques are applied to situations commonly encountered by IS/IT managers. Also included is a discussion of the non-financial issues related to making business decisions (i.e., the balanced scorecard.)

p. Term(s) Offered: Spring/Fall (See instructions for listing.)  q. Max. Section Enrollment: 25

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. Graduate Standing.

UCC Chair Signature/Date: 

Academic Affairs Approval Signature/Date: 

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code
   □ Basic Skill (BS) □ General Education (GE) □ Occupational Education (OC) □ G.E. Codes

Office of the Registrar use ONLY

Date Rec'd: ___ Date Completed: ___ Entered: SCACRSE _ SCADETL _ SCARRES _ SCAPREQ _
NEW COURSE INFORMATION FORM

Course Identification:
Prefix: MISM  Number: 661  Title: Information Security/Assurance

Course Description:
Students investigate concepts and methodologies for managing information-related risks. Design, implementation, and operation of relevant techniques and systems are presented and discussed. Students review current standards and regulations relating to information assurance and information security. Students learn both strategic risk management and tools and tactics.

Course Outcomes and Assessment:
Upon completing this course, students will be able to:

1. Research, evaluate, and differentiate the legal, ethical and professional issues of Information Assurance and Security.
   - Assessment: given a case study, students will be able to identify and explain the various legal, ethical and professional issues related to the practices of Information Security and Information Assurance.
2. Research, evaluate, and differentiate the various standards related to information security and information assurance.
   - Assessment: class exercise requiring students to identify the key elements of relevant standards and apply them to information security and information assurance case studies.
3. Research, evaluate and differentiate the critical characteristics of information that information assurance and security aim to protect.
   - Assessment: given example security events, identify which one or more of the critical characteristics of information are affected.
4. Research, assess, and develop measures to control risks to information.
   - Assessment: given a case study, students will be able to research various methodologies, assess each for applicability, quantify risk, and create a Risk Management Plan to mitigate and/or control risks related to information.
   - Assessment: students will be tested on the key elements, purposes, and relationships of each of these documents. Students will develop a high level plan incorporating each of these documents.
6. Research, evaluate, and differentiate the various potential human, physical, and virtual security risks and threats to information and corresponding defensive measures.
   - Assessment: given a case study or classroom laboratory setting, students will be able to research the various Information Security threats and vulnerabilities and recommend physical and virtual defense systems to prevent loss.

Course Outline including Time Allocation:
1. Legal, ethical and professional issues of Information Security and Information Assurance. (15%)
2. Standards for Information Security and Information Assurance. (10%)
3. Critical characteristics of information. (15%)
4. Risk Management in Information Security and Information Assurance. (20%)
5. Information Security and Information Assurance documentation. (20%)
6. Human, physical, and virtual security risks, threats, and defense. (20%)
I. ACTION TO BE TAKEN: MODIFY AN EXISTING COURSE

Notes:
1. Complete all parts of Sections I and II; complete only those items in Section III that represent changes.
2. If either prefix or number is being changed, use 'Delete Course' and 'Create New Course' forms rather than this form.
   a. List the changes to be made (See Proposed Changes a through p below): Change title and description; remove prerequisite.
   b. Term Effective (6 digit code only): [201001] Examples: 200801(Spring), 200805(Summer), 200808(Fall)
      Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. CURRENT: Include information that is in the current course database.
   a. Course Prefix              b. Number
   MISM[861]                     c. Enter Contact Hours per week in boxes.
   LECTure [ ]  LAB [ ]  INDependent Study – Check (x) [ ]
   Practicum: [ ]  Seminar: [ ]

   d. Course Title: Principles of Info Security

III. PROPOSED CHANGES: Complete only those boxes that represent proposed changes identified in Section I. Leave all other spaces blank.
   a. Course Prefix              b. Number
   [ ] [ ]
   c. Enter Contact Hours per week in boxes.
   LECTure [ ]  LAB [ ]  INDependent Study – Check (x) [ ]
   Practicum: [ ]  Seminar: [ ]

   d. Course Title: Information Security/Assurance (Limit to 30 characters/spaces.)

   e. College Code: [ ]
   f. Department Code: [ ]

   Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.
   g. Type: [ ] Variable  [ ] Fixed
   h. Maximum Credit Hours [ ]
   i. Minimum Credit Hours [ ]

   j. May Be Repeated for Added Credit: Check (x) [ ] Yes  [ ] No

   k. Levels: Check (x) [ ] Undergraduate  [ ] Graduate  [ ] Professional

   l. Grade Method: Check (x) [ ] Normal Grading  [ ] Credit/No Credit only (Pass/Fail)

   m. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.
      Students investigate concepts and methodologies for managing information-related risks. Design, implementation,
      and operation of relevant techniques and systems are presented and discussed. Students review current standards
      and regulations relating to information assurance and information security. Students learn both strategic risk
      management and tools and tactics.

   n. Term(s) Offered: [ ] (See instructions for listing.)
   o. Max. Section Enrollment: [ ]

   p. Prerequisites/Co-requisites/Restrictions: Limited to 100 spaces.

UCC Chair Signature/Date: 1/21/10
Academic Affairs Approval Signature/Date:

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code
[ ] Basic Skill (BS) [ ] General Education (GE) [ ] Occupational Education (OC) [ ] G.E. Codes

Office of the Registrar use ONLY

Date Rec’d: [ ] Date Completed: [ ] Entered: SCACRSE ___ SCADETL ___ SCARRES ___ SCAPREQ ___
NEW COURSE INFORMATION FORM

Course Identification:
Prefix: MISM Number: 662 Title: Network Penetration Testing

Course Description:
Students investigate the purposes and practice of network penetration testing as a component of an information security program. Students research the purposes of network penetration testing and various options for executing network penetration tests. Students design, conduct, and interpret network penetration tests on laboratory networks and systems, to include the application and validation of corrective measures.

Prerequisite: MISM 661

Course Outcomes and Assessment:
Upon completing this course, students will be able to:

1. Research the purposes of a network penetration test and testing options.
   Assessment: Students will demonstrate network penetration testing knowledge through classroom exercises and assignments.

2. Synthesize network penetration testing knowledge and formulate network penetration testing plans for various scenarios.
   Assessment: Given scenarios, students will articulate network penetration testing requirements and will recommend specific network penetration testing options.

3. Execute a network penetration test and interpret the results.
   Assessment: In a laboratory environment, students will execute network penetration tests and interpret the results orally and in writing.

4. Recommend and implement preventive, defensive, and corrective measures based on network penetration testing results.
   Assessment: In a laboratory environment, students will recommend and implement preventive, defensive, and corrective measures based on network penetration testing results. Students will repeat previous network penetration tests to validate the efficacy of the measures.

Course Outline including Time Allocation:

1. Purposes and options for network penetration testing (15%)
   a. Vulnerability identification
   b. Independent verification and validation
   c. Internal/External/Black box
   d. Exploitation

2. Network penetration testing plans (15%)
   a. Options
   b. Documentation

3. Execution and interpretation of network penetration tests (40%)
   a. Tools and configuration
   b. Risks and limitations
   c. Execution
   d. Interpretation

4. Recommendation and implementation of measures (30%)
   a. Host based
   b. Network based
   c. Policy based
   d. Verification
I. ACTION TO BE TAKEN: MODIFY AN EXISTING COURSE

Notes:

3. Complete all parts of Sections I and II; complete only those items in Section III that represent changes.
4. If either prefix or number is being changed, use 'Delete Course' and 'Create New Course' forms rather than this form.
   a. List the changes to be made (See Proposed Changes a through p below): [Change title, description, and prerequisite.]
   b. Term Effective (6 digit code only): 201001 Examples: 200801(Spring), 200805(Summer), 200808(Fall)
      Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. CURRENT: Include information that is in the current course database.

   a. Course Prefix: [MIS]  
   b. Number: 662
   c. Lecture [ ]  Lab [ ]  Independent Study – Check (x) [ ]
      Practicum: [ ]  Seminar: [ ]
   d. Course Title: [Advanced Network Security]

III. PROPOSED CHANGES: Complete only those boxes that represent proposed changes identified in Section I.
     Leave all other spaces blank.

   a. Course Prefix  
   b. Number
   c. Enter Contact Hours per week in boxes.
      Lecture [ ]  Lab [ ]  Independent Study – Check (x) [ ]
      Practicum: [ ]  Seminar: [ ]
   d. Course Title: [Network Penetration Testing] (Limit to 30 characters/spaces.)
   e. College Code:  
   f. Department Code:

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: [ ] Variable  [ ] Fixed  
   h. Maximum Credit Hours [ ]  i. Minimum Credit Hours [ ]

j. May Be Repeated for Added Credit: Check (x) [ ] Yes  [ ] No

k. Levels: Check (x) [ ] Undergraduate  [ ] Graduate  [ ] Professional

l. Grade Method: Check (x) [ ] Normal Grading  [ ] Credit/No Credit only (Pass/Fail)

m. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.
   Students investigate the purposes and practice of network penetration testing as a component of an information security program. Students research the purposes of network penetration testing and various options for executing network penetration tests. Students design, conduct, and interpret network penetration tests on laboratory networks and systems, to include the application and validation of corrective measures.

n. Term(s) Offered:  
   (See instructions for listing.)  
   o. Max. Section Enrollment: [ ]

   p. Prerequisites/Co-requisites/Restrictions: Limited to 100 spaces [MIS662]

UCC Chair Signature/Date:  
Academic Affairs Approval Signature/Date:

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code
   [ ] Basic Skill (BS)  [ ] General Education (GE)  [ ] Occupational Education (OC)  [ ] G.E. Codes

Office of the Registrar use ONLY

Date Rec’d:  
Date Completed:  
Entered: SCACRSE  SCADETL  SCARRES  SCAPREQ  

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Leonard

Thank you for the detailed feedback in your note. I think we've addressed everything; details follow:

Need a Form B from the Graduate and Professional Council.
  Complete - coming in campus mail.
Need a signed Form C.
  Complete - coming in campus mail.
Concern was raised about the need for an additional 3 credit course. Is it possible to incorporate content into the program without adding another 3 credit course?
  ISM faculty considered the possibility of adding the content in other courses, but decided it would not be practical or efficient (the program doesn't have anything similar, and no slack in other classes). However, the faculty felt strongly about the need for the content, so decided to propose an additional course. We researched 12 other Master's IT/IS programs regionally and nationally regarding required hours, and found that they ranged from 30-40. While 36 puts us in the upper 50% regarding hours required, it is not out of line with similar programs, and we felt that the Financial Mgt course would strengthen and distinguish our program (reinforcing the Mgt part of ISM and reflecting the input we received from industry).
Proposed checksheet adds the MISM 630, but neither includes it as a 10th course, nor changes the total to 30.
  Edited "Ten core courses required" in header. Credit hour totals look right - is there another change?
Remove old (existing) Form E's.
  OK.
Is MISM 661 the same course? Still need some kind of a prerequisite.
Minor modifications as reflected in the revised Form E. ISM faculty does not think this course needs a prerequisite based on content. Is MISM 662 still the same course?

Minor modifications as reflected in the revised Form E.

I've placed the Form B and Form C in campus mail. Attached revision addresses the other items (and I changed the implementation date to Fall 2010). Please let me know if you have any questions or need any additional information.

Thanks.

--Jim

Jim Jones, Ph.D.
Assistant Professor
Ferris State University
231-591-3148 (office)
231-944-8020 (cell)

Leonard Johnson/FSU
09/23/2009 12:48 PM
To James H Jones/FSU@FERRIS
cc Sandra L Alspach/FSU@FERRIS, Leonard Johnson/FSU@Ferris, Andrew L Purvis/FSU@FERRIS, Barbara A Ross/FSU@Ferris, Joanne Gerst/FSU@FERRIS, Paula L Hadley-Kennedy/FSU@Ferris, Donald Flickinger/FSU@FERRIS, Harold G Palmer/FSU@Ferris, Terrence J Doyle/FSU@FERRIS, Ronald A Mehringer/FSU@FERRIS, Kristen L Motz/FSU@FERRIS, Fritz J Erickson/FSU@FERRIS
Subject information Systems Management proposal

Hi Jim

The UCC met on Monday and discussed your proposal to make minor curriculum changes to the Information Systems Management program. Please see the list of concerns listed below, and make revisions to the proposal as appropriate. Feel free to contact Hal Palmer or me should you have any questions.

Need a Form B from the Graduate and Professional Council. Need a signed Form C. Concern was raised about the need for an additional 3 credit course. Is it possible to incorporate content into the program without adding another 3 credit course? Proposed checksheet adds the MISM 630, but neither includes it as a 10th course, nor changes the total to 30. Remove old (existing) Form E’ s. Is MISM 661 the same course? Still need some kind of a prerequisite. Is MISM 662 still the same course?

Thanks.
Attached is the approved curriculum proposal: Information Systems Management - Minor Curriculum Cleanup