COLLEGE OF THE MARSHALL ISLANDS

COURSE OUTLINE

CIP No. 11.1001

ICS 220
Alpha Number

Advanced Computer Studies
Course Title

Course Description

Examines information technology (IT) issues, application and security of IT for business needs, and implementing computer networks. Introduces concepts and theory of database management systems, with emphasis on database application using the Relational Model.

Course prepared by: BIT Department April 2007

<table>
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<tr>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>16</td>
<td>48</td>
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<tr>
<td>Laboratory</td>
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<td>Clinical</td>
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<td>Seminar</td>
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Total Credit Hours 3

Purpose of Course:
Degree Requirement
Degree Elective X
Certification
Developmental
Other

Prerequisite(s)
B or better ICS 101 & permission of instructor required

Last date reviewed or revised: May 2009

Signature, Curriculum & Assessment Chairperson

Signature, Dean of Academic Affairs

Signature, Vice President for Academic and Student Affairs

Date

Date

Date
I. **Advanced Computer Studies**  
*Course Title*

II. **Course Objectives**

A. **General Outcome**  
Students who complete this course will:
1. Understand the complex issues facing the IT (Information Technology) manager and CTO (Chief Technology Officer) relating to the implementation, use and operation of a computer network (BIT 1, 2, 3, 4, 5)
2. Effectively communicate the requirements and advantages of information technology aspects to both technical and non-technical individuals (BIT 1, 3)
3. Identify risks to information technology for specific business sectors and implement appropriate safeguards (BIT 1, 2, 4)
4. Apply the conceptual basis of a Relational database (BIT 1, 2, 4, 5)

B. **Student Learning Outcomes**  
Upon completion of this course, the student will be able to:
1. Create a user's guide for implementation of a computer network.
2. Identify, describe, and justify the impact of various aspects of information technology on specific business functions
3. Prepare security, managerial, and administrative policies and procedures appropriate for information technology
4. Build and manage a Relational database

III. **Course Content**  
This course provides students with application and evaluation of security of IT for business needs
1. Professional ethics, IT related laws, and IT policies and procedures
2. Advanced computer networking Local Area Network (LAN) technologies including remote access and control
3. Emerging and current Wide Area Network (WAN) technologies
4. Information Security (INFOSEC)
5. Help-desk technologies, methodologies, practice and procedures
6. Systems analysis to define the Computer Information System (CIS)
7. Database theory, design, implementation and administration

IV. **Methods of Instruction**
1. Lecture with audio-visual aids, handouts and demonstrations
2. Team-based projects
3. Individual projects

V. **Equipment and Materials**
1. Computer lab with computer projector
2. Personal storage devices
3. Dedicated server

VI. **Suggested Methods of Evaluation**
1. Individual and team-based projects
2. Assignments
3. Reports
4. Quizzes
5. Tests
6. Presentations

Letter grades will be assigned per CMI grading policy