

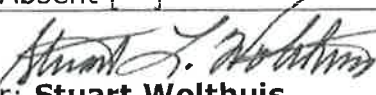

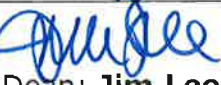

Section 1 - Approvals**Approvals**

Name of Proposal: New Course - CIS 200

Submitted by: Aaron Curtis

Signature: 

Date: October 13, 2015

Procedure	Recommendation/Signature	Date
Faculty Vote: For [], Against [], Abstain [], Absent []		
1. Approved by Department CIS	Signature:  Chair: Stuart Wolthuis	19 Oct '15
2. Approved by Department BUSM	Signature:  Chair: David Preece	10-21-15
3. Approved by College Bus, Comp. & Govt.	Signature:  Dean: Jim Lee	10/21/2015
4. Approved by General Education (if any GE course is affected)	Signature: N/A GE: David Beus	
5. Approved by University Curriculum Committee	Signature:  UCC: Jennifer Lane	10/21/15
6. Approved by Deans' Council	Signature: AVP: John Bell	
7. Approved by the President's Council (for new programs)	Signature: Pres: John Tanner	

Section 2 – Overview (Support)

Summary: This document summarizes our proposal to

- Discontinue IS 330 as a course offering in the CIS Department
- Renumber CIS 100 to CIS 200
- Update the requirements for the BUSM major to substitute IS 330 with CIS 200.
- Update the requirements for the IS and IT majors to substitute CIS 100 with CIS 200
- Update the requirements for the CS, IS, and IT minors to substitute CIS 100 with CIS 200.

For several years, we've had two courses (CIS 100 and IS 330) with overlapping topical content albeit with a different focus. IS 330 has been targeted toward our business majors to give them some foundations in systems-related topics whereas CIS 100 has been targeted largely toward potential CS/IS/IT majors looking to get a feel for the discipline and to gain business context awareness.

After further review and work on the learning objectives of both courses, we've determined this is a good time to formally merge CIS 100 and IS 330 into a new course, CIS 200 [numbering may be adjusted once we check availability]. Beginning Spring semester, the CIS 200 will be available as both an in-class as well as an online course as well, providing greater flexibility for students.

CIS 100 has recently been added to this list of possible GE courses as well. In addition to providing CIS / BUSM students with richer interaction opportunities in the classroom, we hope it will also help BUSM students meet their GE requirements.

We do not anticipate this change will affect faculty teaching loads. Without further changes (such as online course offerings) we anticipate the same number of courses will need to be taught. This change simply consolidates the curricular material being presented.

Changes in Graduation Requirements

- This change is not expected to lengthen graduation requirements. Neither of the two courses being merged had prerequisites. If anything, allowing BUSM students to fulfill this requirement with a GE course could slightly decrease the time needed for graduation.

Changes in Expected Teaching Load.

We are not creating a new class, simply renumbering a course. We do not expect this change will dramatically effect the teaching load in the department.

Section 3 - Program Proposal

Upon approval, the information presented on this course proposal sheet will become binding on the department and the university. Any material changes require a new program proposal.

[If several programs are proposed, a separate Section 3 Program Proposal must be included for each individual program. If the programs are related they may be included in the same overall proposal or they may be submitted separately.]

Effective Date: Spring 2016

College: Business, Computing & Government

Abbreviation: CIS

All Major Requirements Sheets (BUSM, IS, IT) and Minor Requirements Sheets (IS, IT) referring to CIS 100 or IS 330 will now refer to CIS 200.

Immediately following this page, attach the revised Major Requirements Sheet and sample Major Academic Plan.

Following the MRS and MAP, attach PDF copies of the online catalog web pages that should change as a result of this proposal. Indicate the location of changes that should be made.



B.S. in Information Systems

ISBS.2009 (mrs 826)

64-67 credits, incl. 6-8 GE credits

Effective Date: 12/2009

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Required courses for admission to the major

18 Credits

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
CIS 100 200	Fundamentals of Info. Systems & Tech.	3		F,W,S		
CIS 101	Beginning Programming	3		F,W,S		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
IT 224/L	Computer Hardware & Systems	3		F,W,S		
IT 240	Fundamentals of Web Design & Technology	3		F,W,S		
IT 280	Data Comm. Systems and Networks	3		F,W,S		

To be accepted in to this major, you must pass CIS ~~100~~ 200 with a B- or better and all other courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission.** I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CS Program Chair _____ Date _____

Core Requirements

26 Credits

Classes marked "MO" are for admitted majors only.

CIS 205	Discrete Mathematics I (GenEd)	3	CIS 101		F,W,S		
CIS 305	Systems Engineering I	3	CIS 205, Co/Prereq: IS 350	MO	F,W		
CIS 401	Web Application Programming	3	CIS 101, IT 240, or CS 301, and IS 350	MO	F,W,S		
CIS 405	Systems Engineering II	3	CIS 305	MO	W,S		
CIS 470	Ethics in Computer & Information Sciences	2	CIS 405 or Senior Standing	MO	F,S		
IS 350	Database Management Systems	3	CIS 101	MO	W,S		
IS 400	Information Systems Proficiency	0			F,W,S		
IS 430	ITS- Enterprise Resource Planning	3	Jr. or Sr. standing in CIS, BUSM or ACCT	MO	F,W		
IS 485	Project Management & Practice	3	CIS 401, CIS 405, IS 400	MO	F,S		
MATH 221	Principles of Statistics I (GenEd) (MATH 321 or PSYCH 205 may substitute for MATH 221)	3			F,W,S		

Advanced Content Area Electives

9-11 Credits

GROUP 1: Any additional 400-level courses in CS, IS or IT or by permission. (6 Hours)

GROUP 2: Choose one. (3-5 hours). *Note: Many Master's Programs require incoming students to have completed calculus.*

MATH 112	Calculus I (GenEd)	5	MATH 111 or equivalent	F,W,S			
MATH 119	Applied Calculus (GenEd)	4	MATH 110 experience	F,W			
CIS 206	Discrete Math II	3	CIS 205, CIS 202	W			

Fundamental Skills "Minor" in an Environment where IS can be applied

15 Credits

IS professionals must understand their chosen employment environment and prepare to function effectively in it. Each student must complete at least 15 credits in a cohesive body of course work for such an environment.

ACCT 201	Introduction to Financial Accounting	3		F,W,S			
ACCT 203	Introduction to Managerial Accounting	3	MATH 106/110 or higher (not MATH 221) or pass BMQT** or ACT math 22+ or SAT math 500+ AND ACCT 201 w/C- or better AND ACCT 231	F,W,S			
ECON 200	Principles of Microeconomics (GenEd)	3	MATH 110 or Pass BMQT**	F,W,S			
ECON 201	Principles of Macroeconomics	3	ECON 200	F,W,S			
BUSM 242	Ethics and the Legal Environment of Business	3	BUSM 180, ENGL 201	F,W,S			

Total Credits Mapped for Graduation:

- One D+, D, D- is allowed above. All other credits must be C- or better.
- One retake is allowed per class, for up to three classes. Additional retakes require special permission.
- A department-approved assessment test must be taken during your last full semester at BYUH, and is recommended annually.



B.S. in Information Technology

ITBS.2012 (mrs 732)

68 credits, incl. 3 GE credits

Effective Date: 8/2012

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Required courses for admission to the major

15 Credits

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
CIS 100 200	Fundamentals of Info. Systems & Tech.	3		F,W,S		
CIS 101	Beginning Programming	3		F,W,S		
IT 224/L	Computer Hardware & Sys Software/Lab	3		F,W		
IT 240	Fundamentals of Web Design & Technology	3		F,W,S		
IT 280	Data Communication & Networks	3		F,W,S		

To be accepted in to this major, you must pass CIS ~~100~~ 200 with a B- or better and all other courses listed above with a C or better. You must also have a cumulative GPA of 2.0 or higher. I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission.** I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the major or any other major in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor _____ Date _____ Student _____ Date _____ Accepted into the major: CS Program Chair _____ Date _____

Core Requirements

38 Credits

Classes marked "MO" are for admitted majors only.

CIS 202	Object-Oriented Programming	3	CIS 101	MO	F,W,S		
CIS 305	Systems Engineering I	3	CIS 202, Co/Prerequisite: IS 350	MO	F,W		
CIS 401	Web Application Programming	3	CIS 101, IT 240, or CS 301, and IS 350	MO	F,W,S		
CIS 405	Systems Engineering II	3	CIS 305	MO	W,S		
CIS 470	Ethics in Computer & Information Sciences	2	CIS 405 or Sr. Standing	MO	F,S		
IS 350	Database Management Systems	3	CIS 101	MO	W,S		
IT 320	Linux Essentials	3	CIS 101		F,W		
IT 420	Linux System Administration	3	IT 320	MO	S		
IT 426	Computer Network Services	3	IT 224/L, IT 280/L	MO	F		
IT 427	Windows Desktop Configuration	3	IT 224/L, IT 280/L	MO	W		
IT 440	Foundations of HCI	3	CIS 305, IS 400, IT 240, MATH 221	MO	W		
IT 480	Computer Network Design	3	IT 280/L	MO	W		
IT 481	Information Assurance & Security	3	IT 280/L	MO	S		

Math Requirement

6 Credits

CIS 205	Discrete Mathematics I (GenEd)	3	CIS 101	F,W,S		
MATH 221	Principles of Statistics I (GenEd) (MATH 321 or PSYC 205 may substitute for MATH 221)	3		F,W,S		

Elective Requirements

9 Credits

9 hours in additional CIS, CS, IS, or IT coursework at the 300 level or above

Total Credits Mapped for Graduation:

- One D+, D, D- is allowed above. All other credits must be C- or better.
- One retake is allowed per class, for up to three classes. Additional retakes require special permission.
- A department-approved assessment test must be taken during your last full semester at BYUH.



Information Systems Minor

MIIS.2010 (mrs 730)

18 credits

Effective Date: 01/2010

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Complete the following 18 hours of coursework.

Required Coursework						12 Credits
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
CIS 100 / 200 IS 330	Fundamentals of Info. Systems & Tech. / Management Information Systems	3		F,W,S		
CIS 101	Beginning Programming	3		F,W,S		
IT 240	Fundamentals of Web Design and Technology	3		F,W,S		
IS 350	Database Management Systems	3	CIS 101	W,S		
Elective Coursework						6 Credits
An additional 6 credit hours of coursework from the following courses on any 300-400 level CIS course approved by the CIS Department Chair.						
CIS 401	Web Application Development	3	CIS 101, IT 240 (or Instructor Permission), IS 350	F,W,S		
IS 430	Foundations in IT Services, Enterprise Systems, and ERP Skills	3	Business core or IS 350	F,W		
IS 450	Advanced Database Topics	3	IS 350	W,S		
Total Credits Mapped for Graduation:						

I understand that **One retake is allowed per class, for up to three classes. Additional retakes require special permission.** I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the minor or any other minor in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor

Student

Date

No grade below C- will be accepted in fulfilling Minor requirements.



**Information
Technology Minor
MIINFOTECH.2010
18 credits**

Effective Date: 01/2010

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Complete the following 18 hours of coursework.

Required Coursework						9 Credits
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
CIS 100 200	Fundamentals of Info. Systems & Technology	3		F,W,S		
CIS 101	Beginning Programming	3		F,W,S		
IT 224	Computer Hardware and Systems Software	3	CIS 101	F,W		
Elective Coursework						9 Credits
An additional 9 credit hours of coursework in Information Technology including any necessary prerequisite courses.						
Total Credits Mapped for Graduation:						

I understand that **ONE retake is allowed per class, for up to three classes. Additional retakes require special permission.** I understand that if I exhaust my repeats, I risk the chance of not being able to continue in the minor or any other minor in the CIS department. Please acknowledge that you understand this policy by signing below.

Academic Advisor

Student

Date

No grade below C- will be accepted in fulfilling Minor requirements.



B.S. in Business Management

Finance Track

BUSMBS-BMFIN.2014 (mrs 997)

58 credits, including 6 GE credits

Effective Date: 04/ 2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Business Prerequisites						21 Credits (6 GE credits)
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BUSM 180	Introduction to Commerce and Enterprise	3		F,W,S		
ACCT 201	Introduction to Financial Accounting	3		F,W,S		
ACCT 231	Finance and Accounting Software Applications	1.5	ACCT 201 Pre/Co-requisite	F,W,S		
MATH 221	Principles of Statistics (GenEd) (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 106 or 110 or 107 or Pass BMQT**	F,W,S		
ECON 200	Microeconomics (GenEd)	3	MATH 110 or Pass BMQT**	F,W,S		
ECON 201	Macroeconomics	3	ECON 200	F,W,S		
BUSM 232	Mathematics of Finance	1.5	MATH 110 or Pass BMQT**	F,W,S		
ACCT 203	Introduction to Managerial Accounting	3	MATH 106/110 or higher (not MATH 221) or pass BMQT** or ACT math 22+ or SAT math 500+ AND ACCT 201 w/C- or better AND ACCT 231	F,W,S		
Business Foundations						22 Credits
BUSM 242	Ethics & Legal Environment in Business	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 320	Business Communications	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 325	Career Management	1	BUSM 320, 60+ credits (Junior Status)	F,W,S		
BUSM 301*	Business Finance	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221 *see #3 below	F,W,S		
BUSM 304	Principles of Marketing Management	3	BUSM 180, ECON 200	F,W,S		
BUSM 310	Leadership and Management	3	BUSM 180, BUSM 320	F,W,S		
BUSM 361	Operations Management	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221	F,W,S		
CIS 200 IS 330 or IS 430	Fundamentals of Information Systems & Technology Management Information Systems or Foundations in IT Services, Enterprise Systems, and ERP Skills	3	60+ credits (Junior Status)	F,W,S F,W		
Finance Track Required Courses						3 Credits
FIN 360	Financial Statement Analysis	3	BUSM 301	F,W,S		
Finance Track Elective Courses						9 Credits
Select three courses						
ECON 353	Money, Banking & Business	3	ECON 201	W		
FIN 365	Real Estate Finance	3	FIN 360	W,S		
FIN 375	Corporate Finance	3	FIN 360	F,S		
FIN 410	Investments	3	FIN 360	F,W		
Finance Track Optional Courses						2 Credits
FIN 492R	CFA Exam Preparation (Certification)	2	BUSM 301	F,W,S		
Advanced Capstone Courses						3 Credits
BUSM 499	Strategic Management	3	BUSM 242, 301, 304, 310 (Last Semester)	F,W,S		
Total Credits Mapped for Graduation:						

1. No more than one "D" grade may be applied towards the major.
2. All Business prerequisites must be C- or better.
3. (*) B- or better is required for the Business Foundation course BUSM 301.
4. One retake is allowed per class, for a total of up to two major classes.

**BMQT= Business Math Qualifying Test taken in the BYUH Testing Center. Must pass with 70% or better to be able to receive credit for BMQT test (0 cr).

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.
Proposal 12-01



**B.S. in Business Management
Human Resource &
Organizational Behavior Track**
BUSMBS-BMHROB.2013 (mrs 718)
55 credits, including 6 GE credits

Effective Date: 01/ 2013

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Business Prerequisites						21 Credits (6 GE credits)
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BUSM 180	Introduction to Commerce and Enterprise	3		F,W,S		
ACCT 201	Introduction to Financial Accounting	3		F,W,S		
ACCT 231	Finance and Accounting Software Applications	1.5	ACCT 201 Pre/Co-requisite	F,W,S		
MATH 221	Principles of Statistics (GenEd) (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 106 or 110 or 107 or Pass BMQT**	F,W,S		
ECON 200	Microeconomics (GenEd)	3	MATH 110 or Pass BMQT**	F,W,S		
ECON 201	Macroeconomics	3	ECON 200	F,W,S		
BUSM 232	Mathematics of Finance	1.5	MATH 110 or Pass BMQT**	F,W,S		
ACCT 203	Introduction to Managerial Accounting	3	MATH 106/110 or higher (not MATH 221) or pass BMQT** or ACT math 22+ or SAT math 500+ AND ACCT 201 w/C- or better AND ACCT 231	F,W,S		
Business Foundations						22 Credits
BUSM 242	Ethics & Legal Environment in Business	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 320	Business Communications	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 325	Career Management	1	BUSM 320, 60+ credits (Junior Status)	F,W,S		
BUSM 301	Business Finance	3	ACCT 201, ACCT 203, ACCT 231, BUSM 180, BUSM 232, ECON 200, ECON 201, MATH 221	F,W,S		
BUSM 304	Principles of Marketing Management	3	BUSM 180, ECON 200	F,W,S		
BUSM 310*	Leadership and Management	3	BUSM 180, BUSM 320 *see #3 below	F,W,S		
BUSM 361	Operations Management	3	ACCT 201, ACCT 203, ACCT 231, BUSM 180, BUSM 232, ECON 200, ECON 201, MATH 221	F,W,S		
CIS 200 IS 330 or IS 430	Fundamentals of Information Systems & Technology Management Information Systems Foundations in IT Services, Enterprise Systems, and ERP Skills	3	60+ credits (Junior Status)	F,W,S F,W		
Human Resource & Organizational Behavior Track Required Courses						3 Credits
BUSM 327	Human Resource Management	3	BUSM 310	W,S		
Human Resource & Organizational Behavior Elective Courses						6 Credits (Any 6 credits)
BUSM 427	International HR Management	3	BUSM 327	S		
BUSM 457	Talent Management and Training	3	BUSM 327	F		
BUSM 467	Organizational Behavior and Change	3	BUSM 327	W		
PSYC 321	Organizational Behavior	3	PSYC 111	Variable		
Advanced Capstone Courses						3 Credits
BUSM 499	Strategic Management	3	BUSM 242, 301, 304, 310 (Last Semester)	F,W,S		
Total Credits Mapped for Graduation:						

- No more than one "D" grade may be applied towards the major.
- All Business prerequisites must be C- or better.
- (*) B- or better is required for the Business Foundation course BUSM 310.
- One retake is allowed per class, for a total of up to two major classes.

**BMQT= Business Math Qualifying Test taken in the BYUH Testing Center. Must pass with 70% or better to be able to receive credit for BMQT test (0 cr).



**B.S. in Business Management-
Marketing Track**
BUSMBS-BMMKG.2013 (mrs736)
58 credits, including 6 GE credits

Effective Date: 01/2013

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Business Prerequisites				21 Credits (6 GE credits)		
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BUSM 180	Introduction to Commerce and Enterprise	3		F,W,S		
ACCT 201	Introduction to Financial Accounting	3		F,W,S		
ACCT 231	Finance and Accounting Software Applications	1.5	ACCT 201 Pre/Co-requisite	F,W,S		
MATH 221	Principles of Statistics (GenEd) (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 106 or 110 or 107 or Pass BMQT**	F,W,S		
ECON 200	Microeconomics (GenEd)	3	MATH 110 or Pass BMQT**	F,W,S		
ECON 201	Macroeconomics	3	ECON 200	F,W,S		
BUSM 232	Mathematics of Finance	1.5	MATH 110 or Pass BMQT**	F,W,S		
ACCT 203	Introduction to Managerial Accounting	3	MATH 106/110 or higher (not MATH 221) or pass BMQT** or ACT math 22+ or SAT math 500+ AND ACCT 201 w/C- or better AND ACCT 231	F,W,S		
Business Foundations				22 Credits		
BUSM 242	Ethics & Legal Environment in Business	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 320	Business Communications	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 325	Career Management	1	BUSM 320, 60+ credits (Junior Status)	F,W,S		
BUSM 301	Business Finance	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221	F,W,S		
BUSM 304*	Principles of Marketing Management	3	BUSM 180, ECON 200 *see #3 below	F,W,S		
BUSM 310	Leadership and Management	3	BUSM 180, BUSM 320	F,W,S		
BUSM 361	Operations Management	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221	F,W,S		
IS 330 or IS 430	Fundamentals of Information Systems & Technology Management Information Systems	3		F,W,S		
	Foundations in IT Services, Enterprise Systems, and ERP Skills		F,W			
Marketing Track Required Courses				9 Credits		
BUSM 422	Marketing Research	3	BUSM 304 & MATH 221	F,W		
BUSM 421	Integrated Marketing Communications	3	BUSM 304	W,S		
BUSM 429	Strategic Marketing Management	3	BUSM 304, and either 421 or 422 (Both 421 and 422 is preferred)	F,W		
Marketing Track Elective Courses				3 Credits		
BUSM 334	Sales & Customer Relationship Mgmt	3	BUSM 304	W,S		
BUSM 431	International Marketing	3	BUSM 304	S		
PSYC 215	Consumer Behavior	3	PSYC 111	S		
PSYC 405	Multivariate Statistics	3	PSYC 205 or equivalent & Instructor Permission	W		
ART 311	Branding	3	ART 112, 210, 212, Portfolio Review	F,S		
ART/HUM 308	Basic Video Production	3		F,W,S		
BUSM 371	Supply Chain Management	3	BUSM 361	F,W		
HTM 270	Destination Management & Marketing	3	BUSM 180	F,S		
Advanced Capstone Courses				3 Credits		
BUSM 499	Strategic Management	3	BUSM 242, 301, 304, 310 (Last Semester)	F,W,S		
Total Credits Mapped for Graduation:						

1. No more than one "D" grade may be applied towards the major.
2. All Business prerequisites must be C- or better.
3. (*) B- or better is required for the Business Foundation course BUSM 304.
4. One retake is allowed per class, for a total of up to two major classes.

**BMQT= Business Math Qualifying Test taken in the BYUH Testing Center. Must pass with 70% or better to be able to receive credit for BMQT test (0 cr).

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.
Proposal 12-01



B.S. in Business Management- Operations & Supply Chain Track

BUSMBS-BMOSC.2013 (mrs 807)
55 credits, including 6 GE credits

Effective Date: 01/2013

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Business Prerequisites						21 Credits (6 GE credits)
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BUSM 180	Introduction to Commerce and Enterprise	3		F,W,S		
ACCT 201	Introduction to Financial Accounting	3		F,W,S		
ACCT 231	Finance and Accounting Software Applications	1.5	ACCT 201 Pre/Co-requisite	F,W,S		
MATH 221	Principles of Statistics (GenEd) (MATH 321 or PSYC 205 may substitute for MATH 221)	3	MATH 106 or 110 or 107 or Pass BMQT**	F,W,S		
ECON 200	Microeconomics (GenEd)	3	MATH 110 or Pass BMQT**	F,W,S		
ECON 201	Macroeconomics	3	ECON 200	F,W,S		
BUSM 232	Mathematics of Finance	1.5	MATH 110 or Pass BMQT**	F,W,S		
ACCT 203	Introduction to Managerial Accounting	3	MATH 106/110 or higher (not MATH 221) or pass BMQT** or ACT math 22+ or SAT math 500+ AND ACCT 201 w/C- or better AND ACCT 231	F,W,S		
Business Foundations						22 Credits
BUSM 242	Ethics & Legal Environment in Business	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 320	Business Communications	3	BUSM 180, ENGL 201 or ENGL 101 and GE 110	F,W,S		
BUSM 325	Career Management	1	BUSM 320, 60+ credits (Junior Status)	F,W,S		
BUSM 301	Business Finance	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221	F,W,S		
BUSM 304	Principles of Marketing Management	3	BUSM 180, ECON 200	F,W,S		
BUSM 310	Leadership and Management	3	BUSM 180, BUSM 320	F,W,S		
BUSM 361*	Operations Management	3	ACCT 201, 203, 231, BUSM 180, 232, ECON 200, 201, MATH 221 *see #3 below	F,W,S		
CIS 200 IS 330 or IS 430	Fundamentals of Information Systems & Technology Management Information Systems Foundations of IT Services, Enterprise Systems, and ERP Skills	3	60+ credits (Junior Status)	F,W,S F,W		
Operations & Supply Chain Management Track Required Courses						3 Credits
BUSM 371	Supply Chain Management	3	BUSM 361	F,W		
Operations & Supply Chain Management Elective Courses						6 Credits (Any 6 Credits)
BUSM 381	Logistics Management	3	BUSM 361	W,S		
BUSM 391	Project Management	3	BUSM 361	W,S		
BUSM 461	Six Sigma Quality Management	3	BUSM 361	F,S		
Advanced Capstone Courses						3 Credits
BUSM 499	Strategic Management	3	BUSM 242, 301, 304, 310 (Last Semester)	F,W,S		
Total Credits Mapped for Graduation:						

** Substitutions needed, through Academic Advisor

1. No more than one "D" grade may be applied towards the major.
2. All Business prerequisites must be C- or better.
3. (*) B- or better is required for the Business Foundation course BUSM 361.
4. One retake is allowed per class, for a total of up to two major classes.

**BMQT= Business Math Qualifying Test taken in the BYUH Testing Center. Must pass with 70% or better to be able to receive credit for BMQT test (0 cr).

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.
Proposal 12-01

Section 4 - Course Proposal (core)

Upon approval, the information presented on this course proposal sheet will become binding on the department and the university. Any material changes require a new course proposal.

Effective Date: Spring 2016

College: Business, Computing & Government

Course Prefix: CIS

Course Number: 200

NEW COURSE.

Changed Course Number: 100

Full Title: Fundamentals of Information Systems & Technology

Short Title (for Transcript, 30-char max): Fund Info Sys & Tech

Catalog Entry (50-word recommended maximum): Systems theory, quality, decision making and organizational role of information systems. Technology including computing and telecommunications. Concepts of organization and information systems growth and re-engineering.

Prerequisites: None

Credit Hours: 3

Frequency: FWS

Grading Method: A-B-C

Learning Objectives: Information technology, including the Internet, has emerged as one of the critical infrastructures, if not the most critical infrastructure, of modern organizations. Within any organization where you work, you will be touched by information systems and related technologies in various different roles: end-user, developer, or manager. Your ability to understand and use the right technology tools to solve business problems is an important prerequisite for successful performance in your workplace. This course provides the knowledge you need to understand the role of information systems in modern organizations, with particular focus on E-commerce and E-business. Along with skills learned in your functional area, knowledge from this course will help you effectively use information technology for solving business problems. Thus, the major learning objectives of this course are:

1. To develop a strong understanding and appreciation of information systems and how they support business organizations and management decision-making;
2. To understand how the Internet enables electronic commerce and electronic business, thereby changing the dynamics of modern organizations; and,
3. To develop critical thinking and analytical skills in solving business problems that involve information technology.

Assessment Methods:

40% = Exams
20% = Group Assignments
10% = Chapter Guides
10% = Topic Paper
10% = Class Participation/Attendance
10% = Quizzes

100% Total

Immediately following this page, attach a sample syllabus if needed.

Following this page, attach PDF copies of the online catalog web pages that should change as a result of this proposal. Indicate the location of changes that should be made.

Fundamentals of Information Systems & Technology

CIS 200, Sec 01

Course Credits: 3

Prerequisites: None

Instructor: Joshua N. Smith

Office: GCB 143B

Office Phone: 808-675-3388

Email: j.smith@byuh.edu

Office Hours: See CANVAS or email for appointment

Teaching Assistant: Lito Baldado, 808-200-8620, lbaldado@go.byuh.edu

CATALOG DESCRIPTION

Systems theory, quality, decision making and organizational role of information systems. Technology including computing and telecommunications. Concepts of organization and information systems growth and re-engineering. (Prerequisite: None)

COURSE OBJECTIVES

Information technology, including the Internet, has emerged as one of the critical infrastructures, if not the most critical infrastructure, of modern organizations. Within any organization where you work, you will be touched by information systems and

related technologies in various different roles: end-user, developer, or manager. Your ability to understand and use the right technology tools to solve business problems is an important prerequisite for successful performance in your workplace. This course provides the knowledge you need to understand the role of information systems in modern organizations, with particular focus on E-commerce and E-business. Along with skills learned in your functional area, knowledge from this course will help you effectively use information technology for solving business problems. Thus, the major learning objectives of this course are:

1. To develop a strong understanding and appreciation of information systems and how they support business organizations and management decision-making;
2. To understand how the Internet enables electronic commerce and electronic business, thereby changing the dynamics of modern organizations; and,
3. To develop critical thinking and analytical skills in solving business problems that involve information technology.

CIS PROGRAM OUTCOMES AND STUDENT LEARNING OBJECTIVES

- (a) An ability to apply knowledge of computing and mathematics appropriate to the discipline.
- (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- (d) An ability to function effectively on teams to accomplish a common goal.
- (e) An understanding of professional, ethical, legal, security and social issues and responsibilities.
- (f) An ability to communicate effectively with a range of audiences.
- (g) An ability to analyze the local and global impact of computing on individuals, organizations, and society.

iduals, organizations, and society.

(h) Recognition of the need for and an ability to engage in continuing professional development.

(i) An ability to use current techniques, skills, and tools necessary for computing practice.

IS Only

(j) An understanding of processes that support the delivery and management of information systems within a specific application environment. [IS]

IT Only

(j) An ability to use and apply current technical concepts and practices in the core information technologies. [IT]

(k) An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems. [IT]

COURSE MATERIALS

Text Book: Information Systems: A Manager's Guide to Harnessing Technology, v. 3.0

- Author: John Gallaugher
- eISBN: 978-1-4533-6657-8
- Publisher: Flatworld Knowledge

Student Formats

- Online Pass \$24 or Digital All Access Pass \$49, you can buy it yourself: <http://students.flatworldknowledge.com/course?cid=2433553&bid=1712669> (Links to an external site.)

- Nawaimaka Nakayama (CIS Dept. Admin. Asst.) can purchase for you and charge your student account, contact her: CB 117, 808-675-4771, nawaimaka.nakayama@byuh.edu

GRADING

40% = Exams

20% = Group Assignments

10% = Chapter Guides

10% = Topic Paper

10% = Class Participation/Attendance

10% = Quizzes

100% Total

Exams

There will be two section examinations and a final exam in this course. Please mark the exam dates in your calendar. All exams are comprehensive and topics include all class discussions, lectures, notes, materials, assignments, videos, etc. The final exam for this course will be held in the classroom during the last regularly scheduled day of the semester (see course schedule for date and time).

Quizzes

To ensure that students stay current with the assigned readings, the instructor will give several short quizzes during the semester. Quizzes count for **5%** of your grade. These quizzes will focus on the assigned readings and review questions. Students who arrive during a quiz **will not be allowed** to take the quiz. **There are no early quizzes or make-up quizzes under any circumstance**. The lowest quiz score will be dropped.

Mini Group Projects

Throughout the semester, you will work on three mini projects. The purpose of these

projects is to provide you with the training for solving managerial problems by using application software. The instructor will provide the details of each mini project as the class progresses. All groups are required to complete the written solutions by the dates and times specified. For some of the mini projects, an oral presentation is also required.

Case Studies

Each chapter of the textbook contains short case studies and *Key Takeaways* that promote critical thinking. The instructor will assign cases to individual groups. Each group will need to prepare and present a solution/discussion to its assigned case. PowerPoint slides are required for the in-class presentation of the cases. Group members should participate equally to prepare and present the in-class presentation.

Chapter Guides

Each chapter of the text contains "Guide" sections each with a set of discussion questions. Each student must prepare answers to the assigned discussion questions, which may be discussed during class. Those who are unprepared to discuss will lose participation points. It is the students responsibility to engage in classroom discussion and activities. Failure to engage in the learning process will decrease both learning and academic performance.

Guides are assigned for each chapter broken into segments of six or more questions each. Each question is worth 3pts for a maximum of 18pts for each Guide assignment. The lowest two Guide assignment scores will be dropped.

Topic Paper

One of the most challenging but crucial responsibilities for your future career growth and success is to keep current in the rapidly changing information systems and technology environment. Staying current is critical to this area of study.

With this in mind, each individual must prepare a three to five page paper (full pages, cover page and bibliography are additional) about the topic of their choice, but **must be related and relevant to some aspect of information systems and**

technology, and must be current (from Jan 2015 to now). Once you have selected a topic, please submit the paper topic assignment in Canvas.

Each paper should be formatted with one inch margins, double-spacing, and 12 point font. Suggested websites that will help you keep current on the latest technology developments include cio.com, cmpnet.com, cnet.com, datamation.com, informationweek.com, techweb.com, zdnet.com, computerworld.com, etc. DO NOT CUT AND PASTE INFORMATION FROM A SOURCE [WEBSITE, BOOK, MAGAZINE, ETC.] WITHOUT GIVING CREDIT TO THE ORIGINAL AUTHOR AND PUTTING IT IN QUOTES! NOT GIVING CREDIT IS PLAGIARISM AND WILL RESULT IN A ZERO ON THE ASSIGNMENT. Your topic paper will be analyzed using TurnItIn which scans and compares all papers turned in and with data on the Web. To research your project you are encouraged to check the website of software vendors, such as Oracle, Microsoft, IBM, etc., regularly to know about their latest developments. The **Topic Paper will be worth 10%** of your final grade and is due the final day of class. There will be checks on your progress, to include: topic selection, research and drafts.

Attendance & Participation

Class attendance and quality participation are important to the success of this class and 5% of your grade is based on attendance and participation. If you do miss a class, you are responsible for obtaining class notes, announcements, handouts, and assignments from your classmates or from website postings.

Active participation constitutes answering questions addressed to the class, asking questions, offering insight on discussions, volunteering answers on practice exercises, etc. Points will be deducted for lack of participation, or for arriving late. Also, computers are for classroom use only and **students will lose points for working on other projects during class time**. Likewise students should not use mobile devices for activities unrelated to the class.

Group Work

You will be **assigned** to a group and are responsible for organizing yourselves,

dividing up the work, and deciding how relative contributions should be measured. It is your responsibility to **promptly** inform the instructor of any dysfunctional group dynamics and to solicit help. All group members must:

- Participate in all group activities,
- Participate in class discussions,
- Strive to maintain positive working relationships with their group members,
- Complete all assignments,
- Assist classmates,
- Freely express their ideas, thoughts, comments, and constructive criticisms to their group members, the instructor, and the class.

It is the responsibility of the group to ensure that all members understand all concepts related to the completed projects and presentations. If any member has not demonstrated adequate mastery of these skills, it is the responsibility of the group to evaluate and compensate him or her appropriately. The instructor may ask questions about any completed project or presentation to any group member and any incomplete or unsatisfactory answers will affect the group grade. However, this will be limited to the course-work that is group-based.

Group grades will also be adjusted by a multiplier (ranging from 0.0-1.0+) that is determined by ratings and feedback from group members, including your cooperation, participation, and how fairly you contributed in creating project deliverables compared to other team members on the team.

For example, if you have four people on your team, you will grade each other. If your three team mates "grade you" a 0.9, 1.0, 0.9, then your project grade will be multiplied by $(0.9+1.0+0.9)/3$ or $2.8/3$ or 0.9333. Therefore, it is good to work well together and contribute equally. If you sit back and let your team mates do all the work, your multiplier could be very low and would negatively impact your Group assignments. The instructor will have the final determination to resolve grades, including group assignments.

Presentation Etiquette

Building and demonstrating professionalism is very important for CIS students, especially for your future career development. Therefore, students are expected to dress properly (at least business casual) when they give presentations. Shorts, t-shirts, and sandals are not acceptable attire for class presentations. Shirts should be tucked-in and students should look professional.

**Students are required to use Microsoft PowerPoint or another equivalent software application for all presentations. In general, each presentation should consist of three parts:

- (1) **Introduction** of the topic and the presenter(s);
- (2) **Main content**; and
- (3) **Conclusion**, including Questions and Answers.

Guidelines on how to organize the content and make effective presentation slides will be provided by the instructor, if needed.

Due Dates & Time For Submitting Work

Students are expected to complete ALL homework/assignments by the specified deadline. Late work will not be accepted, though the instructor reserves the right to allow late work under exceptional (and rare) circumstances. Students are encouraged to submit assignments early.

Quality of Work

The expectation is for **professional quality** work both in terms of **content and presentation**.

- Spelling, grammar, punctuation, clarity of expression, and presentation will count in every piece of work you do for this course. If you have trouble with spelling, grammar or punctuation, have someone proofread your package. The Reading & Writing Center on campus is a recommended resource.

- Your grade will be based on what you say or write and how you present it. It becomes difficult to read for content if the mechanics are sloppy, and a superior job may not be recognized as such if presented in an error-laden package.
- Good ideas sloppily expressed will receive mediocre grades, as will flashy presentations with mediocre content.
- Students whose native language is not English must meet the same quality requirements as others and should be sure to get help well ahead of the due date if this is an issue. Do not rely on your group members to correct your grammar and punctuation.
- Please carefully read all assignments. You are responsible to turn in ALL required components listed on the assignment handouts. One of the quickest ways to lose points on an assignment is to overlook the deliverable details. Be careful.

All work submitted for evaluation must be neat and clearly marked indicating the question/case to which it relates. Your work should clearly state the following:

1. The title of the work
2. Your name (or the names of all the group members, if it is group work)
3. Your Group number, if it is group work
4. The date of submission.

When you submit any files via Canvas, the files should also be named appropriately. For example, if you are submitting Mini-Project 1 for Group 2, the file should be named: *Group2-MiniProject1.doc*

Course Schedule

All course assignments (quizzes, homework, tests, ethics assignments, etc) will be posted on Canvas. It is the student's responsibility to watch for changes on Canvas and to meet ALL due dates/times.

Course Grade Determination

Final grades are assigned based on the following percentages / GPAs for the semester:

A	94 to 100+% / 3.7-4.0
A-	90 to <94% / 3.5-3.7
B+	87 to <90% / 3.3-3.5
B	83 to <87% / 3.0-3.3
B-	80 to <83% / 2.7-3.0
C+	77 to <80% / 2.5-2.7
C	73 to <77% / 2.0-2.5
C-	70 to <73% / 1.7-2.0
D	Below 70% / 1.7
F	Below 60% / 1.0

Incomplete Grades

In deciding to give an incomplete grade, the policy of the University will be strictly enforced. This means that an incomplete will only be given in rare and extreme circumstances that are out of control of the students and that does not permit the student to complete the work of the course. This also means that a student signing up for "too many" courses or having "too much work" in other courses to successfully complete this course will not be considered a reasonable justification for requesting an incomplete. This also means that "forgetting" to register for a required course for graduation that then makes it impossible to graduate without adding the course as an independent study course will also not be considered for an incomplete grade. Students are expected to know their limitations, capabilities, and course requirements, and be responsible for their academic performance.

Unofficial Withdrawals & Failing Grades

Students who register to take the course and do not officially withdraw from the course, yet fail to satisfactorily complete the course requirements will be given a failing grade. Students that officially withdraw from the course will be given a withdrawal (W) or withdrawal fail (WF). Determination will be based upon the grade of everything submitted to the point of withdrawal, including attendance and participation.

UNIVERSITY POLICIES

Office of Honor

[\(Links to an external site.\)](#) Honor code commitments will be enforced. It is the student's responsibility to be familiar with all Honor Code requirements, some of which are included below.

Dress and Grooming Standards

The dress and grooming of both men and women should always be modest, neat and clean, consistent with the dignity adherent to representing The Church of Jesus Christ of Latter-day Saints and any of its institutions of higher learning. Modesty and cleanliness are important values that reflect personal dignity and integrity, through which students, staff, and faculty represent the principles and standards of the Church. Members of the BYU–Hawaii community commit themselves to observe these standards, which reflect the direction given by the Board of Trustees and the Church publication, "For the Strength of Youth". The Dress and Grooming Standards are as follows:

Men

A clean and neat appearance should be maintained. Shorts must cover the knee. Hair should be clean and neat, avoiding extreme styles or colors, and trimmed above the collar leaving the ear uncovered. Sideburns should not extend below the earlobe. If worn, moustaches should be neatly trimmed and may not extend beyond or below the corners of mouth. Men are expected to be clean shaven and beards are not acceptable. Earrings and other body piercing are not acceptable. Footwear must be worn in all public places.

Women

A modest, clean and neat appearance should be maintained. Clothing is inappropriate when it is sleeveless, strapless, backless, or revealing, has slits above the knee, or is form fitting. Dresses, skirts, and shorts must cover the knee. Hairstyles

should be clean and neat, avoiding extremes in styles and color. Excessive ear piercing and all other body piercing are not appropriate. Footwear must be worn in all public places.

Academic Honesty

By attending this course and this university you have agreed to live the honor code yourself and expect the same of others

(See <http://w2.byuh.edu/studentlife/honorcode/docs/ces.htm#1>). Violations of Academic Honesty, the Dress and Grooming Standards, Disruptive Behavior Policy of this university will not be tolerated in this course. Violators will be subject to the appropriate discipline and possibly receive a UW or Failing grade in the course.

Discrimination

The University is committed to a policy of nondiscrimination on the basis of race, color, sex (including pregnancy), religion, national origin, ancestry, age, disability, genetic information, or veteran status in admissions, employment, or in any of its educational programs or activities.

Title IX and Sexual Misconduct

Brigham Young University – Hawaii is committed to promoting and maintaining a safe and respectful environment for the campus community. Title IX prohibits all sexual misconduct against any participant in an educational program or activity.

Sexual Misconduct is defined as;

Sexual Harassment is unwelcomed speech or conduct of a sexual nature which includes unwelcomed sexual advances, request for sexual advances, request for sexual favors and other verbal, non-verbal, or physical conduct is unwelcomed if it not requested or invited.

Stalking is repeatedly following, monitoring, harassing, threatening or intimidating another by phone, mail, electronic communication or social media without legitimate purpose.

Domestic and Dating violence is a pattern of abusive behavior in any relationship that is used by one partner to control another partner. This includes behaviors that

intimidate, manipulate, humiliate, isolate, frighten, terrorize, coerces threaten, blame, hurt, injury or wound.

Sexual violence/assault is actual or attempted sexual contact with another person without that persons consent.

Consent cannot be obtained when someone is a minor, under the influence of drugs or alcohol or has certain disability. In the absence of an outward demonstration, consent does not exist. If at any time it is reasonably apparent that either party is hesitant, confused, or uncertain, both parties should stop.

The following individual has been designated to handle reports of sexual misconduct and other inquiries regarding BYU-Hawaii compliance with Title IX:

Debbie Hippolite-Wright PhD
Title IX Coordinator
Vice President of Student Development & Life
Lorenzo Snow Administrative Building
55-220 Kulanui St.
Laie, HI 96762
Office Phone: [808] 675-4819
E-Mail: titleix@byuh.edu
Sexual Harassment Hotline: (808) 780-8875

BYU-Hawaii's Office of Honor upholds a standard which states that parties can only engage in sexual activity freely within the legal bonds of marriage between a man and a woman. Consensual sexual activity outside the bonds of marriage is against the Honor Code and may result in probation, suspension, or dismissal from the University.

Grievances

The course syllabus may act as a contract and referenced for any student grievances. Students are encouraged to discuss questions, concerns, or grievances with the course instructor. Formal grievance concerns should be taken to the CIS Department Chair who will advise.

Services for Students with Special Needs

If you have a disability and need accommodations, you may wish to self-identify by contacting:

Services for Students with Special Needs

McKay 181

Phone: [808]675-3518 or [808]-675-3999

Email address: aunal@byuh.edu)

*The Coordinator for Students with Special

Needs is Leilani Auna.

Students with disabilities who are registered with the Special Needs Services should schedule an appointment with the instructor to discuss accommodations. If the student does not initiate this meeting, it is assumed no accommodations or modifications will be necessary to meet the requirements of this course. After registering with Services for Students with Special Needs, Letters of accommodation will be sent to instructors with the permission of the student.

ACKNOWLEDGEMENTS

Brother Stuart Wolthuis for his template syllabus; BYUH Title IX, Office of Honor, and Special Needs Services divisions for standardized wording on University policies.

Section 4 - Course Proposal (core)

Upon approval, the information presented on this course proposal sheet will become binding on the department and the university. Any material changes require a new course proposal.

Effective Date: Spring 2016

College: Business, Computing & Government

Course Prefix: CIS

Course Number: 100

CIS 100 will become inactive effective Spring 2016.

Section 4 - Course Proposal (core)

Upon approval, the information presented on this course proposal sheet will become binding on the department and the university. Any material changes require a new course proposal.

Effective Date: Spring 2016

College: Business, Computing & Government

Course Prefix: IS

Course Number: 330

IS 330 will become inactive effective Spring 2016.

Area II - Breadth of Knowledge

1. **Humanities & Culture (3 credit hours)** *Any course from the following list:*

- ART 220 Experience in Visual Arts (3)
- ART 255 Beginning Ceramics (3)
- ART 196 Art History I (3)
- ENGL 201 Literary Analysis and Research (3)
- ENGL 251 Fundamentals of Literature (3)
- HWST 101 Introduction to Hawaiian Studies (3)
- HUM 101 Introduction to Humanities (3)
- HUM 290 Introduction to Film (3)
- ICS 261 Cultures of Oceania (3)
- ICS 262 Cultures of Asia (3)
- ICS 264 Cultures of Europe (3)
- ICS 266 Cultures of Latin America (3)
- MUSC 101 Introduction to Music Literature (3)
- MUSC 102 World Music Cultures (3)
- MUSC 103 Music Fundamentals (3)
- MUSC 384 Music History I: Antiquity to 1750 (3)
- MUSC 385 Music History II: 1750 to 1900 (3)
- MUSC 386 Music History III: Music since 1900 (3)
- PAIS 105 Introduction to Pacific Island Studies (3)
- THEA 115 Introduction to Theatre (3)

2. **Science & Technology (3 credit hours)** *Any course from the following list:*

- ASTR 104 Principles of Astronomy (3)
- BIOL 100 Introduction to Biology (3)
- BIOL 112 General Biology (3) (science majors only)
- CHEM 100 The World of Chemistry (3)
- CHEM 105 General Chemistry I (3) (science majors only)
- CIS ~~200~~ 400 Fundamentals of Information Systems & Technology (3)
- CIS 101 Beginning Programming
- GEOL 105 Geology of the Pacific Basin (3)
- IT 240 Fundamentals of Web Design & Technology (3)
- PHSC 100 Principles of Physical Science (3)
- PHYS 100 Conceptual Physics (3)
- PHYS 121 General Physics I (3)

3. **Social Science (3 credit hours)** *Any course from the following list:*

- ANTH 105 Introduction to Cultural Anthropology (3)
- COMM 110 Intercultural Communication (3)
- ECON 110 Society and Economic Choices (3)
- ECON 200 Principles of Microeconomics (3)
- EDU 200 Human Growth and Learning in Schools (3)
- GEOG 101 Introductory Geography (3)
- HIST 120 American History to 1865 (3)
- HIST 121 American History Since 1865 (3)
- HIST 201 History of Civilization to 1500 (3)
- HIST 202 History of Civilization Since 1500 (3)
- LING 210 Introduction to Linguistics (3)
- POSC 101 Introduction to Politics (3)
- POSC 110 American Government (3)
- POSC 170 International Relations (3)

91. Personal Productivity with IS Technology (0) (all semesters) Online instruction in personal productivity concepts and skills using e-mail, word processing, spreadsheet, database, presentation graphics, web browsing, and the Internet.

~~**330. Management Information Systems** (3) (F, W, S) Manager's use of information technology to support decision making at all levels. Integrates and uses management functions, computer databases, accounting principles, model building and graphical representation.~~

350. Database Management Systems (3) (W, S) Introduction to design and implementation of database management systems. Emphasis on data structures, normalization of data, data modeling, and database methods. (Prerequisite: CIS 101.)

390R. Special Topics in Information Systems (1-3) (Variable).

399R. Internship in Information Systems (1-12) (Variable) Students may receive credit for applied experience in information systems. Prior approval must be obtained and a program coordinated by a faculty member and the on-site supervisor. (Prerequisite: Permission of the instructor.)

400. Information Systems Proficiency (0) (F, W, S) Students demonstrate proficiency at important Information Systems skills by examination. This qualifies them to enter the IS capstone experience.

430. Foundations in IT Services, Enterprise Systems, and ERP Skills (3) (F, W) Students learn principles of IT Services and enterprise systems that dramatically impact enterprise business processes; including IT components, architecture, interconnections, best practices, and ERP skills. (Prerequisite: Junior or Senior standing and acceptance into one of the CIS, Business or Accounting degree programs)

430L. Foundations in IT Services, Enterprise Systems, and ERP Skills Lab (0) (F, W) Hands-on experience and instruction beyond that available during regular class time in IS 430. (Prerequisite: Concurrent enrollment in IS 430)

435. Advanced Concepts in Enterprise Resource Planning (ERP) Systems (3) (F, W) Students learn advanced concepts related to enterprise resource planning (ERP) systems such as data warehousing, business intelligence and business process management. Students will complete several hands-on exercises using the SAP ERP system and other related software tools. (Prerequisite: IS 430.)

435L. Advanced Concepts in Enterprise Resource Planning (ERP) Systems Lab (0) (F, W) Hands-on experience and instruction beyond that available during regular class time in IS 435. (Prerequisite: Concurrent enrollment in IS 435)

440. Advanced Topics in SAP ERP Systems (3) (S) Students learn advanced topics related to the SAP enterprise resource planning (ERP) system such as production planning, materials management, sales and distribution, and human capital management. Students will complete several hands-on exercises using the SAP ERP system. (Prerequisites: IS 430 and one of the following: ACCT 356, IS 435, IS 485)

440L. Advanced Topics in SAP ERP Systems Lab (0) (S) Hands-on experience and instruction beyond that available during regular class time in IS 440. (Prerequisite: Concurrent enrollment in IS 440)

Computer & Information Sciences (CIS)

100. Fundamentals of Information Systems & Technology (3) (F, W, S) ~~Systems theory, quality, decision making and organizational role of information systems. Technology including computing and telecommunications. Concepts of organization and information systems growth and re-engineering.~~

101. Beginning Programming (3) (F, W, S) Extensive hands-on software development and testing using variables, arrays, instruction sequences, decisions, loops, and subroutines. May also include dynamic web pages (CGI) and regular expressions.

101L. Beginning Programming Lab (0) (F, W, S) Hands-on experience and instruction beyond that available during regular class time in CIS 101. (Corequisite: CIS 101).

200. Fundamentals of Information Systems & Technology (3) (F, W, S) Systems theory, quality, decision making and organizational role of information systems. Technology including computing and telecommunications. Concepts of organization and information systems growth and re-engineering.

202. Object-Oriented Programming (3) (F, W, S) Introduction to object-oriented software development. Classes, Objects, Instantiation, Inheritance, Design, and Documentation. (Prerequisite: CIS 101).

205. Discrete Mathematics I (3) (F, W, S) Functions, relations, and sets; basic logic; proof techniques basics of counting. (Prerequisites: CIS 101).

206. Discrete Mathematics II (3) (W) Proof techniques (continued), graphs and trees, discrete probability. (Prerequisite: CIS 202 and 205.)

305. Systems Engineering I (3) (F, W) Systems planning and analysis from concept to requirements culminating at high-level design. Includes use of tools, modeling and generation of appropriate documentation. Uses team projects. Students are expected to take CIS 405 the following semester. (Prerequisite: CIS 202; Prerequisite or concurrent enrollment: IS 350.)

401. Web Applications Development (3) (F, W, S) Web application programming using databases and current web technology. (Prerequisite: CIS 101, IT 240 or CS 301, and IS 350.)

405. Systems Engineering II (3) (W, S) A continuation of CIS 305, usually taken the previous semester. Systems design, implementation, validation and maintenance. Uses team projects. (Prerequisite: CIS 305.)

470. Ethics in Computer & Information Sciences (2) (F, S) Explores foundations of ethical behavior in the world of Internet and computer technology including property protection, crime, viruses, privacy, reliability, and work environments. (Prerequisite or concurrent enrollment: CIS 405 or Senior Standing.)