I. **Call to Order.** The meeting was called to order at 12:12 p.m. in University Hall 156 on Monday, April 10, 2006 by Interim Vice President Ed Wheeler. The Parliamentarian verified quorum by head count, but only 135 of those in attendance signed roster, with 3 excused absences. (Total number of faculty is 281). The roster is on file in the Vice President’s Office with the official minutes.

II. **Approval of Minutes** – The minutes of March 20, 2006 were approved as presented.

III. **Old Business**

   A. **VPAA Search**

     Dr. Stone introduced Dr. Cathy Rozmus from Georgia Southwestern State University. Dr. Rozmus will be making a presentation open to all on campus at 1:30 tomorrow, with a question and answer period following.

     The CVs of the four candidates are on e-reserve under Dr. Stone’s name. Dr. Charles Hurt from West Chester University will make his presentation on Friday. Next week Dr. Andrew Phillips of the University of Wisconsin – Eau Claire will make his presentation on Wednesday, and Dr. Ellen Whitford of Central Connecticut State University will make her presentation on Friday.

     Feedback sheets will be available at all presentations.

IV. **New Business**

   A. **Introduction of New Faculty**

     Dr. Felix Hamza-Lup, Assistant Professor of Computer Science, and Professor Jewell Anderson, Reference Librarian and Assistant Professor of Library Science, were introduced. Dr. Hamza-Lup joined the faculty in January, and Professor Anderson joined the faculty in March.
B. Library move

The library renovation is almost complete. The library will close for the move on May 15 and will reopen on June 5. Summer session starts on June 1, so be sure to take the library closure into account when planning your classes.

The Student Recreation Facility will open in the fall semester.

C. Approval of May 2006 Graduation Candidates (see attachment 1)

Candidates for graduation were approved contingent on completion of degree requirements. There were a few additions to the list. Any changes after this date should be sent to Kim West.

D. Report of the Finance Committee

The minutes of the February 23 meeting are available online at the Academic Affairs website. Included is the Board of Regents Budget Plan for Fiscal Year 2007. There will be another meeting of the Finance Committee after Vice President Brignati hears back from the Board of Regents regarding the budget.

E. Reports of the Standing Committees to the Faculty

1. University Curriculum Committee
   (Action items only: Please refer to UCC minutes of March 22, 2006.)

   Dr. Wheeler gave some background on the eCore proposal below and answered questions. After some discussion it was decided to table the proposal until fall, when more time can be devoted to discussion.

   “The eCore proposal that was tabled at the last meeting was brought back to the table. Reports from Dr. Mark Finlay’s meeting in Athens were distributed by email prior to the meeting (see attachments 2, 3, and 4). There was extended discussion of the proposal and a friendly amendment was made (underlined). The proposal passed as amended.

   Proposed:

   The Curriculum Committee of the College of Arts and Sciences at Armstrong Atlantic State University recommends that the university approve the e-core curriculum as parallel core curriculum for three years, with a report and recommendation on our status to be made by the Advisory Committee on
Distributed Learning to the University Curriculum Committed in February 2010. More precisely:

(1) Students who apply to Armstrong as ecore students (meaning they intend to complete the whole core curriculum using ecore courses) will be able to use the ecore curriculum as their core curriculum in completing an Armstrong degree.
(2) Students who transfer to Armstrong after having completed the ecore will be treated as students who have completed the core.
(3) Students who apply to Armstrong for regular admissions can only use ecore courses to the extent that they satisfy the core curriculum requirements of AASU.”

It was moved, seconded and approved to accept Items 1 and 2 below from the March 22, 2006 minutes of the University Curriculum Committee.

1. A motion was made, seconded, and approved to Create the following course:
   LEAD 1001  Introduction to Leadership Studies 2-0-2
   Prerequisite:  Eligibility for ENGL 1101
   Description: A concept-based approach to the interdisciplinary field of leadership studies.

   Rationale: Creating an interdisciplinary minor in leadership has been a priority at AASU for some time. This course will provide a foundation for that minor and for a growing number of leadership courses and initiatives at the university.

   Effective Term: Fall 2006
   CURCAT:
   Major Department: Arts & Sciences
   Can course be repeated for additional credit? no
   Maximum number of credit hours: 2
   Cross-listed courses: none
   Grading Mode: normal
   Instruction Type: lecture

2. A motion was made, seconded, and approved to Create the following minor:
   Leadership Studies..................................................17 hours
   LEAD 1001, PHIL 2251, COMM 2280, PSYC 5330U
   Six semester hours from: COMM 3050, ENGL 3720, GWST 5550U, HSCA 4620, PHIL 3200, POLS 5535U, PSYC 5150U, PSYC 5500U
Rationale: Creating an interdisciplinary minor in leadership has been a priority at AASU for some time. This minor will serve AASU’s commitment to foster the abilities and essential values necessary to produce effective leaders.

Effective Term: Fall 2006

It was moved, seconded and approved to accept Item 1 under Section A below from the March 22, 2006 minutes of the University Curriculum Committee.

A. Liberal Studies

1. A motion was made, seconded, and approved to Modify Area F of the Bachelor of General Studies program:

   Core Area F ..................................................................................................................18 hours
   COMM 2280 - Speech Communication
   One or two courses selected from:
   ARTS 1100 - Art Appreciation
   ARTS 2710 - Art History I
   ARTS 2720 - Art History II
   ARTS 1270/MUSC 1270 - World of Art and Music
   MUSC 1100 - Music Appreciation
   PHIL 2201 - Introduction to Philosophy
   PHIL 2251 - Ethics and Contemporary Moral Philosophy
   THEA 1100 - Theatre Appreciation
   THEA 1200 - Introduction to Theatre
   or
   Two foreign language courses in sequence
   Two foreign language courses beyond 1001 in sequence.
   One or two courses selected from:
   ANTH 1102 - Introduction to Anthropology
   ITEC 1050 - Computer Concepts and Applications
   CSCI 1060 - Computer Concepts and Applications for Science Students
   CSCI 1301 - Introduction to Programming Principles
   ECON 2105 - Principles of Macroeconomics
   ECON 2106 - Principles of Microeconomics
   HIST 2111 - History of America to 1877
   HIST 2112 - History of American Since 1865
   ITEC 1300 – Fundamentals of Information Technology
   ITEC 1310 – Programming in Visual Basic
   PSYC 1101 or 1101H – Introduction to Psychology
   SOCI 1101 - Introductory Sociology
   One or two core area D courses (not used for core area D)
Physical Education ........................................................................................................3 hours

It was moved, seconded and approved to accept Items 1 and 2 under Section G below from the March 22, 2006 minutes of the University Curriculum Committee.

G. History

1. A motion was made, seconded, and approved to Change the following course prerequisite and description:
   HIST 1112H Honors Civilization II 3-0-3
   Prerequisite: acceptance in honors program or permission of the instructor
   Description: Replaces HIST 1115 1112 as a component of the university honors program. While the subject matter is the same as HIST 1115 1112, treatment of it varies greatly. Likewise, instruction goes beyond the usual lecture method, allowing students to read widely under the direction of the professor.

   Rationale: The Honors Program encourages students who are not currently admitted into the Program to use success in honors coursework as an avenue for admission. Such a change in HIST 1112H will be consistent with similar prerequisites for other Honors courses. The change in course number is simply a correction for a typographical error.

   Effective Term: Fall 2006

2. A motion was made, seconded, and approved to Change the following course prerequisite/corequisite and description:
   HIST 4990 Senior Thesis in History 3-0-3
   Prerequisite or Corequisite: HIST 4500
   Description: Open only to seniors. Directed research under the supervision of a permanent member of the history department. Application to the academic affairs committee of the history department by mid-term of semester (excluding summer) before enrollment in course. Completed thesis submitted four weeks prior to end of semester, and oral presentation to the history department faculty. If the department faculty approve the completed thesis for honors, the degree designation on the student's transcript will be noted "Honors in History." Consult the department office for details. Students must have completed 15 semester hours of upper division history courses, including HIST 4500, and have a 3.5 grade point average in all history courses. May not be counted in the 27 hours required for the major. This course meets the "honors in the major" component for students in the university honors program. Directed research under the supervision of a thesis committee. See department for application and for policies.
Rationale: Removes the unnecessary policy considerations from the course description. Catalog copy (p. 105) will be revised to direct students to departmental policies.

Effective Term: Fall 2006

It was moved, seconded and approved to accept Item 1 under Section I below from the March 22, 2006 minutes of the University Curriculum Committee.

I. Mathematics

1. A motion was made, seconded, and approved to Delete the following course:
   MATH 1101

   Rationale: The ACMS (Advisory Committee on Mathematical Subjects) has been aware of the need for a course that is of sufficient rigor for a college-level offering while providing quantitative reasoning and skills for students who do not need the traditional algebraic studies. To this end, AASU created MATH 1001 in Spring 2005, and promised to phase out MATH 1101, since the ACMS expects that no institution would offer more than two of the courses Math 1001, Math 1101, Math 1111. AASU does not intend to offer MATH 1101 after Summer 2006.

   Effective Term: Fall 2006

It was moved, seconded and approved to accept Item 1 under Section L below from the March 22, 2006 minutes of the University Curriculum Committee.

L. Gender and Women's Studies

1. A motion was made, seconded, and approved to Modify the courses to be approved for the GWST Minor and Undergraduate/Graduate Certificate:

   ARTS 5760U - History of Photography
   ARTS 5770U - Art and Identity
   ENGL 5340U - Literature by Women
   FILM 5025U - Critical Approaches to Film, Television, and Popular Culture
   GWST 1101 - Introduction to Gender and Women's Studies
   GWST 2101 - Ethics, Values, and Gender
   GWST 2200 - Gender in Global Contexts
   GWST 5000 - Topics in Gender and Women's Studies
   GWST 5500U - Topics in Women's Leadership
GWST 5700 - Feminist Theory
HIST 3740 - History of American Women
HIST 5660U - Topics in the History of Women and Gender
NURS 3355 - Women’s Health
PSYC 3100 - Human Sexuality
PSYC 5500U – Women and Work
PUBH 5570U - Women and Minority Health Issues
PUBH 5575U - Health and Sexuality Education
SOCI 3150 - Sociology of the Family
SOCI 3300 – Social Stratification
SOCI 3800 – Sociology of Sexuality
SOCI 5600 – Sociology of Gender

Rationale: The expansion of GWST offerings reflects the expertise of new members of the AASU faculty

Effective Term: Fall 2006

II. College of Health Professions

It was moved, seconded and approved to accept Item 1 under Section B below from the March 22, 2006 minutes of the University Curriculum Committee.

B. Dental Hygiene

1. A motion was made, seconded, and approved to Modify the Program of Study for the Bachelor of Science in Dental Hygiene Degree

Related Field Courses 18 hours

Four Courses Selected From:
- HSCA 4640 – Managed Care Concepts
- PUBH 5550U – Nutrition
- PSYC 3050 – Child Psychology
- PSYC 3800 – Health Psychology
- PSYC 5750U – Psychology of Aging
- HSCC 3760 – Environmental & Community Health Issues

One Course Selected From:
- HSCC 3120 – Health Policy and Law
- HSCA 4620 – Health Care Administration
- PSYC 3050 - Child Psychology

One Course Selected From:
- GERO 5500U – Survey of Gerontology
- GERO 5510U – Healthy Aging
Rationale: The additional course selections complement the existing program of study. Note: PSYC 3050 may only be selected once.

It was moved, seconded and approved to accept Item 1 under Section H below from the March 22, 2006 minutes of the University Curriculum Committee.

H. Respiratory Therapy

1. A motion was made, seconded, and approved to Modify the related field courses for the respiratory major.

C: Related Field Courses.................................11 Hours
BIOL 3400: Human Physiology
HLPR 2000: Intro to Research in Health Professions
One Course from the following:
   HSCA 4610: Health Care Economics OR
   HSCA 4640: Managed Care Concepts
One Course from the following:
   HSCA 4600: Principles of Human Resources Management OR
   HSCA 4620: Principles of Mgt in Health Service Organizations

Rationale: A goal of our program since the semester conversion is to prepare graduates who are prepared to move quickly into lower and middle level supervisory/management positions in the health care setting. The approval of the 2 new leadership courses (HSCA 4600, 4620) last year enables us to incorporate a leadership requirement in the related field area of the curriculum.

IV. School of Computing

It was moved, seconded and approved to accept Items 1-5 under Section A below from the March 22, 2006 minutes of the University Curriculum Committee.

A. Computer Science

1. A motion was made, seconded, and approved to Change the following course description:
CSCI 1301  Introduction to Programming Principles 3-0-3
Description: Overview of computers and programming. Fundamentals of structured computer programming; primitive data types, expressions, control statements, methods, recursion, arrays, searching, sorting; debugging techniques; introduction to algorithm analysis.
Rationale: Since Fall 2005, the credit hours for this course have been reduced to 3 from 4. The amount of materials remains the same. The post course assessment survey indicated weakness on recursion, arrays, and sorting. This has been confirmed by the instructors. So, the proposed change is to move recursion from CSCI 1301 to CSCI 2410 so students will have more time to learn fundamental subjects on control structures, methods, and arrays. Recursion is traditionally covered in the data structures course. It is not used in CSCI 1302. So, removing it from 1301 is a good choice.

Effective Term: Fall 2006

2. A motion was made, seconded, and approved to Change the following course description:
   CSCI 1302  Advanced Programming Principles 3-0-3
   Description: Object-oriented programming including: design and implementation. Topics include: object and class design, inheritance, polymorphism, interfaces, graphical user interfaces and event-driven programming, exception handling, file input and output.

   Rationale: In response to ABET concerns regarding the inclusion of analysis and design in all the required major courses, we revised the course description to reflect the material being covered in the course.

   Effective Term: Fall 2006

3. A motion was made, seconded, and approved to Change the following course description:
   CSCI 2410  Data Structures and Algorithms 3-0-3
   Description: Data structures and algorithms and analysis of their time and space complexity. Implementation and analysis of efficient data structures and algorithms. Topics include: (for examples, recursion, generics, linked lists, stacks, queues, hash tables, trees, graphs, and heaps,) and sorting algorithms, and time and space complexity analysis. techniques (for example, dynamic, greedy, randomized, and approximation). Use of professional application programmer application program interfaces (API's).

   Rationale: Recursion is traditionally covered in a data structures course. Most of the data structures texts have a chapter on recursion. We actually cover recursion, but it is not in the description. So, we revise the description to reflect what we are actually covering. Advanced algorithmic techniques removed from the previous course description are covered in CSCI 5410U.

   Effective Term: Fall 2006

4. A motion was made, seconded, and approved to Change the following course title, prerequisites, and description:
CSCI 2490 Object Oriented Programming in C++ Programming 3-0-3
Prerequisite: CSCI 2410 Data Structures CSCI 1302 Advanced Programming Principles
Description: Object-oriented programming in C++ with an emphasis on the implementation of efficient dynamic data structures (e.g., linked lists, stacks, queues, hash tables, trees, graphs, and heaps). Coverage of C++ programming techniques: primitive data types, control structures, functions, pass-by-value, pass-by-reference, arrays, pointers, C-strings, recursion, classes and objects, file input and output, operator overloading, inheritance, exception handling, templates, and STL.

Rationale: (1) The current C++ course description does not match the title. (2) The C++ course is taught as a data structures course using C++. (3) C++ is still widely used to develop system software. Alumni survey indicated that a comprehensive introduction of C++ is needed. (4) Dr. Paul Goransson, President of Meetinghouse Data Communications, participated in a comprehensive program review in Fall 2005. He recommended a broad introduction on C++ for this course. (5) This also addresses ABET evaluation team’s comments regarding clarifications of the topics taught in 2410 and 2490.

Effective Term: Fall 2006

5. A motion was made, seconded, and approved to Change the following course prerequisite:
CSCI 3341 Introduction to Operating Systems 3-0-3
Prerequisite: CSCI 2490 and CSCI 3202

Rationale: CSCI 3341 requires C++. We propose to add CSCI 2490 as a prerequisite to satisfy the requirement.

Effective term: Fall 2006

2. Executive Committee

   Helen Taggart

Committee preferences surveys will be available online this year. Phyllis Panhorst will be contacting the faculty by email when the preference forms are available.

3. Faculty Development

   Dick Nordquist

There are two field trips left this semester, and there is still time to sign up. One is a visit to Midway with Carol Ebel on April 14, and the other is a tour of the onion fields with Tom Howard on April 28.
4. **Library**

The Library Committee has chose the recipient of the Brockmeier Award.

5. **Writing**

6. **Research & Scholarship**

The awards ceremony for the Student Scholarship Symposium will be held tomorrow in UH 158.

7. **Academic Appeals – No Report**

8. **Faculty Activities**

The Garden Tour will be held Wednesday and begins at 12:30 by the fountain. The Bocce Beach Scramble will be held on Friday.

9. **Faculty Evaluation – No Report**

10. **Faculty Welfare – No Report**

11. **Financial Aid & Scholarship**

   The committee met April 5. Although the committee was targeted to select 21 scholarship recipients, they only chose 17 with 8 alternates. They have agreed to give the remaining 4 back to the other scholarship committee sub-groups.

12. **Honors Advisory**

   The committee will meet on April 20 to select the recipient of the President’s Scholarship.

13. **International Programs & Activities – No Report**

14. **Student Conduct – No Report**

15. **Student Recruitment, Advisement, & Retention – No Report**

16. **Admissions & Academic Standing – No Report**

17. **Grievance – No Report**

V. **Other Business.** There was no other business.

VI. **Announcements**

   A. **Faculty Lecture Series**

   Bob LeFavi
The final faculty lecture for 2005-06 will be given on Friday, April 21. Catherine Gilbert will present, “Prince Edward Island: More than Anne of Green Gables.”

B. Week of the Young Child Book Fair and Conference  Mary Ellen Cosgrove

The 15th Annual Week of the Young Child Scholastic Book Fair will be held April 17-21 in University Hall Atrium 2. The week will culminate with the Week of the Young Child Conference.

C. Give for the Gulf

There will be presentations on the Give for the Gulf activities on April 18 and 19 in Solms 108.

D. Phi Kappa Phi

The inaugural class of Phi Kappa Phi members was inducted yesterday.

VII. Adjournment. Dr. Ed Wheeler made some closing remarks. He thanked the Executive Committee, Dr. Dennis Murphy, Dr. Patrick Brennan, and the faculty for all they have done during his time as Interim Vice President.

The meeting was adjourned at 1:05 p.m.

Respectfully submitted,

Phyllis L. Panhorst
Coordinator of Faculty Information
May 2006 Degree Candidates

School of Computing

Bachelor of Science

Computer Science
- Gyuchoon Cho
- Jeffrey J. Costello
- Elizabeth Kathleen Hoenshell
- Virabout Sriratanakoul

Bachelor of Information Technology
- Kevin Chuong Bui
- Michael Reston Carson
- Anthony B. Creed
- Maribel M. Lim
- Mark D. Simmons
College of Health Professions

Associate of Science in Dental Hygiene

Joseph W. Bailey
Stephanie Diane Barnes
Ashlee Marie Creamer
Yvonne Mae Valera Dicosimo
Anna Sheree Griffis
Mary Catherine Hammill
April Brooke Hand
Damien Eric Lawhorn
Barbara Ann Lindell
Annmarie Maloy
Sabrina Ann Nicholais
Sarah Elizabeth Parker
Robin Nicole Peters
Amy R. Rhinier
Brenna Lee Keller Richardson
Arika Nichole Sansom
Barbara Woods Sheehan
Lana Marie Spivey
Kelley Denise Stephens
Carrie D. Strong
Mary M. Tarplee
Haley Beth Vickers
Brandi Alexis Wood

Bachelor of Science in Dental Hygiene Education

Angela Deanna Yeomans

Bachelor of Health Science

Kristin Gail Arp
Dekira Tanaz Bowe
Jayne Allison Carroll
LaQuitia Vanyona Crawford
Manuela Emmrich
Indya LaRhea Graham
Jill Cairns Growe
Emily K. Hilderbrand
Melissa Kay Hodge
Stephen Dwight Howell
Harriett Pinckney Johnson
Ashley Kristine Lavender
Yvette E. Manuel
Jennifer Marie McDonald
Erica Rose Neff
Victoria Sue Neurath
Jacqueline Lark Osgood
Amber Leigh Overstreet
Bachelor of Science in Medical Technology

Virginia Marie Barton
Renée Tanika Chang
Elizabeth Renée Jamerson
Charles E. Pauldo II
Stacey Loretta Searcy

Bachelor of Science in Nursing

Alison Jeannette Ackerman
Allison Michelle Bacot
Jennifer Lenore Bailey
Laura Lee Brausch
Sarah L. Chamberlain
Amy Leone Clark
Stacy W. Crawford
Laura Rollins Dantin
Jennifer Marie DeMott
Shelley Lynn Dornburg
Rochelle Edwards-Smith
Elizabeth Smith Elmadolar
Gary Paul Enos
Deborah F. Epps
James R. Glazier Jr.
Rita Marie Greenbush
Quonzetta Maria Habeeb-Ullah
Leslie Ann Hardy
Vivian J. Haskins-Palesfsky
Jonathan Wade Hodges
Donna Naomi Howard-Lawson
Holley Lynn Keeran
Nathaniel Craig Kerlin
Cassandra Coe Latham
Terria Marie Manning
S. Christen Matthews
Rene H. McAuliffe
Brian Keith McKay
Katie Elizabeth Miller
Barrett Fredrick Foster Morrison
Miguel Nemeth
John R. Nienow Jr.
Brandi Nichole O'Hayer
Amanda R. Parker
Lisa Lane Pearce
Amy Marie Plew
Guiying Ren
Paul M. Richard
Leigh James Rogers
Katherine Nicole Roth
Jorge J. Rubio
Lauren Elizabeth Sanders
Rachel E. Seer
Lecreshia Sheniece Shields
April R. Talbott
Amber LeeAnn Thomas
Frances C. Thomas
Teresa Scott Tucker
Lisa Marie Tyler
Jennie M. Vandenbouten
Ashley Dawn Vann
Donna Marie Wearrien
Elizabeth Ybarra White
Kristi Michelle Wyatt
Jill Yarbrough

Bachelor of Science in Radiologic Sciences

Allison Michelle Bass
Amy Charlene Brooks
Stephanie Michelle Burnsed
Chafrena Lolice Burton
Ursula Alena Carden
Gary Kevin Cartee
Joan B. Cowart
Priscilla Elaine Garrison
Niquetta Martinique Gilbert
Denise C. Harding
Joseph Benjamin Harriot
Heather Marie Hosti
Wendy Marie McCarthy
Kayla Marie McDaniel
Dawn Norris
Michele Irene Oliver
Erin Michele Paquet
Heather Elizabeth Phillips
Erin Elizabeth Rickert
Coyt Andrew Rountree
Joseph Roy Spring
Kenneth Harry Storey
Nicole Lynn Upham
Brandie Lynn Warfel
**Bachelor of Science**

*Respiratory Therapy*
  James Robert Davis  
  Sherese Montelle Harris  
  Krystle Alicia Johnson  
  Saleemah Javacia Jones  
  Steven Brooks Lanigan  
  Christine Johnson Moore  
  Brandi Nickisha Ortiz  
  Lori Sharette Smith  
  George H. Sweat  
  Ha Minh Truong

**Bachelor of Science in Education**

*Speech Language Pathology*
  Erica Lee Baker  
  Brooke M. Carter  
  E. Kimberly Cohen  
  Sonya Teletha Dodson  
  Barbara Oneida Laughlin  
  Emily Simonê Lewis  
  Jennifer Kelley Morgan  
  Melissa Anne Muller  
  Joy Dori O'Quinn
College of Education

Bachelor of Science in Education

Art Education
Nicole Taylor Baker
Ester Woo

Bachelor of Science in Education

Early Childhood Education
Amanda Jennifer Alderman
Melissa Anne Bennett
Jacqueline W. Bobbitt
Kristina Yvonne Broom
Jennifer N. Buddie
Joshua David Cooper
Jodi Leigh Denison
Erin Kelly Dessart
CJ Francis DeVoe
Kelly Bradley DeWeese
Misty Dawn Ellison
Elizabeth Thiot Ernst
Jennifer Lynn Farmer
Jennifer Leigh Griswold
Danielle S. Holmes
Krista Celeste James
Seth Traft Kolodny
Melissa Lynn Kruger
Shannon Moody Kruschoitz
Katherine Rolff Lea
Sarah June Lee
Michelle Mason
Tabitha Lynn McCoy
Angeline Elizabeth Peck
Gloria Rabich Sapp
Amani Nicole Smith
Kathleen Anne Smith
Susan Carter Thomas
Amy Elizabeth Tighe
Susan Shields Grimes Totten
Mary Ellen Tyler
Courtney Leigh Walsh

Bachelor of Science in Education

Health and Physical Education
Jennifer L. Alfirov
Amanda Christina Futrell
Ryan Paul Glazer
Cynthia Alma Mills
Bachelor of Science in Education

Middle Grades Education
Raven Leigh All
Jessica Jeannette Beare Edmunds
Avistine Yvonne Cook
Emily Kaye Dudley
Andrea Maria Gordon
Stephen Foster Hotard
Veronica Toscano Johnson
Gina Elise Middleton
Claudia Marie Rowell
Frank Alfred Thomas
Ann Watson Tillman

Bachelor of Science in Education

Special Education
Charles William Bell Jr.
Kimberly Diane Bolen
Kimberly J. Butler
Laura Gail Heyman
James M. Keppel
Rebecca Erin Peterson
Amber M. Rahn
Heather Maria Sims
Susan E. Smith
Associate of Applied Science in Criminal Justice
Sophia Lavern Vines

Associate of Arts
Lorna M. Balser
Michelle Bartley
Jennifer D. Baucom
Jessica Abbys Mamie Cobb
Destiny Nakita Cooper
Benjamin Lee DeFore
Sheryl Elaine Edwards
Aremanda Denise Fann
Christopher Rolland Fennell
Julie Elizabeth Futch
Andrea Leigh Gaustad
LaToya Shyanna Harris
Julia Nguyen Hoang
John Mason Hogan
Michelle Lynn Kimbrough
Vida Denise Love
Regina Dawn Maez
Aisha LaRae Michael
Latrice Sherrod Moore
Shanta D. Noel
Teray Marquel Perry Sr.
Phillip Ivey Pope
Stephanie K. Sands
Sarai Santiago
Laurie Mechelle Todd
Ari Jacob Warsaw
Shamika M. Waters
Eric Scott Wente
Paris Chantelle Wilson

Bachelor of Fine Arts
Visual Arts
Emily Garnette Broome
Marianna Clare Harkleroad
Ryan Lanier Reese
Lindsay S. Taylor
Ruth A. Verduzco

Bachelor of General Studies
Rebekah A. Barrett
LaKeisha Rochelle Bell
Justin Allen Bickmore
Natalie Lorraine Bright
Bachelor of Music Education
Kristopher Paul Britt
Jessica Lynn Scribner

Bachelor of Science

Applied Physics
Hassein Jerez Bashiriaan
William Casey English

Bachelor of Science

Biology
Crystal Alexis Archer
Crystal Ann Bass
Joshua Stephen Beam
Katrina Nicole Brewton
Jason Edward Brown
Candace Marie Buckley
Naemi M. Cavazos
Jacquelyn Christine Dickey
Tangela Suzette Edwards-Frazier
Laura Michelle Griffiths
Anadeji Hicks
Eric Joseph Moore
David Michael Nguyen
Paul J. Spiers
Amanda Leigh Svendsen
Robin D. Tisdale-Turner
Eva Ann Whitehead
Stephanie Kayleen Zeller

Bachelor of Science

Chemistry
Nguyen Truong Nguyen
Amanda Leigh Svendsen
Denis Muki Tibah

Bachelor of Science

Criminal Justice
Kristine Ann Blauvelt
Tiffany Nicole Dodgen
Jane Inman Edenfield
Michael Charles Ganem
Kaley Patrice Gaskins
Christopher James Herrmann
Emily Megan Jimmo
Amanda Suzanne Kort
Lindsey Maria Lamprecht
Mary K. Sartain-Abbott
Nelida Sue Sinclair
Scarlett Ann Taylor
James Christopher Watkins  
Danita Dannette Wilson  
Ramona Lafaye Wright  

**Bachelor of Science**

**Mathematical Sciences**
- Elijah Miguel Allen
- Kevin Thomas Jiran
- Jennifer A. Rollins
- Adriana Merill Urato

**Bachelor of Arts**

**Economics**
- Sara Constance Carter
- Chelsea S. Cooper
- Michael Joseph Cosatis
- Damian Edward Douglas
- William C. Grice
- YeKaterina V. Shirokova Gubenko
- Sarah Elizabeth Link
- Katherine Elizabeth Nash
- Brandi Leigh Tarpley
- Tatyana Vladimirovna Zelenskaya

**Bachelor of Arts**

**English**
- David Bradley Bailey
- Frances E. Clark
- Suzette Etter
- Autumn Marie Flynn
- Caroline Christin Grage
- Tiffany Brett Griffin
- Ricardo Eugenio Lyons
- Aisha LaRae Michael
- Kimber Lindsey Parson
- Sabrina Arango Rivera
- Christopher Charles Shirley
- Arianna Dawn Siennick
- Linda Marie Spies
- Foy Monroe Tootle III
- Jennifer Caroline West
- Karen Martha White

**Bachelor of Arts**

**History**
- Patricia M. Berg
- Bianca Bury-Rodriguez
- Elia Baity Cadet
- David R. Coombs
- Michael Lee Evans
Bachelor of Arts

Music
Sarah Nicole LaPollo
Ditrie M. Sánchez

Bachelor of Arts

Political Science
Timothy E. Adkins
José Raúl Aponte
Danira Ibarra Beckmann
Elizabeth Adams Grider
Megan Ann McIntire
Mindi R. Mebane
Rebecca Ann Allison Parker
Sherry Ann Rowland
Kathryn Melissa Smith
Christopher Scott Turner
Jennifer Michelle Turner

Bachelor of Arts

Psychology
Theresa M. Bailey
Elizabeth Appleton Blackmore
Nicole Elizabeth Grayson
Erin K. Howard
Shelby Rhiannon Majors
Cristina Marin
Dana Dacinta Robinson
Carla Cristina Rodríguez Castillo
Rebecca J. Soprych
Kimberly D. South
Regina Thompson
Chris B. Todd

Bachelor of Arts

Spanish
Brenda Coleen Bautista
Bertha E. Hernandez
Virabot Sriratanakoul
Bachelor of Arts

Theatre
Justin Michael Chernivec
Corey Eugene Crumbley
J. Matthew Franklin
Pinya Christina Lindroos
Laura Elizabeth McCreary
Coral Michelle Stacks
TO: VPAA Wheeler and Members of University Curriculum Committee
FROM: Mark Finlay

On March 9, 2006, Ms. Corine Ackerson-Jones and I attended the eCore Advisors and Registrars’ meeting held in Athens. The main purpose of the meeting was to hear reports from the six eCore affiliate institutions (University of West Georgia, Southern Polytechnic State University, Columbus State University, Georgia Southwestern State University, Georgia Highlands College, and Valdosta State University) on recent successes and problems with eCore administrative procedures. A good portion of the meeting was devoted to answering questions that came from me and others at AASU about the possibility of AASU becoming an eCore affiliate. Representatives from these universities and all members of the eCore Administrative Services staff were on hand.

Here is a summary of the topics discussed that might be of interest to the VPAA and members of the UCC.

Academic Rigor

Attendees were rather insistent that eCore courses have proven to be rigorous. These data from the system office suggest that Ds, Fs, and Ws are considerably more common in the basic eCore courses than in the System as a whole:

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Data from GWSU are similar. A Complete report is attached.

The attendees’ main explanation for this phenomenon is that students find that eCore courses are more difficult and require more systematic participation than they had expected. A large number receive Ws automatically simply for failing to log on to the course before the first deadline, others are dropped for non-participation, and other choose to withdraw voluntarily before the midterm date.

The Chemistry Course

Those who helped design the chemistry course insist that it is academically rigorous, successful, and suitable preparation for subsequent study in all disciplines, including more advanced work in chemistry. Data from GWSU show that, since 2003, three of their students have taken CHEM 1211, (with grades of B, F, and W), and one student has taken CHEM 1212 (with a grade of F). In FY 2005, a total of 21 students in the entire state completed the eCore versions of CHEM 1211 and 1212.

The attached report includes the following points that defend this course:
- proper laboratory safety is one of the primary lessons of the “kit”
- the course and its lab haven been scrutinized and approved by insurance and legal personnel
- students develop ideas about lab work independently, rather than a “pack model” of laboratory behavior
- weekly quizzes, tutorials, and other assignments ensure that students keep up with the material
-the requirement for two physical laboratory meetings on-campus (not three, as indicated in my December report), makes the eCore course different from virtually all other efforts to teach chemistry on-line
-the course offers built support for students with disabilities
Defenders of the course urged those with questions to contact the four members of the Chemistry Development Team: Farooq Kahn, Andy Leaviit (whom I know as Associate Director of the WGU Honors Program), Kenneth McGill, and George McKelvy. Purportedly, two of these had been opposed to the concept when they were put onto the team, but then became convinced of the course’s value.

Graduation Rates
eCore has been around since about 1999. Although that is enough time to expect some impact upon graduation rates, attendees and administrators estimated that only 30 students, total, have completed their entire core through the eCore, and then graduated from a USG institution. Their explanation is that most students who take eCore courses do so on a stop-and-go, semester-by-semester basis; that students find eCore courses to academically rigorous; and that eCore courses cost more per credit hour than on campus courses.

Testimonials
Administrators were not able to provide me with specific testimonials about the value the eCore experience. They stated that most students “either loved or hated” the experience. For some students, it truly made a great difference in their ability to get a college education.
None of the affiliate schools are considering ending their involvement with eCore.

Clientele
Those who designed eCore intended the concept to appeal mainly to non-traditional students who had personal, employment, transportation, or other difficulties that made on-campus courses difficult to manage. Over the years, the affiliate institutions have found that eCore courses are becoming more attractive to some traditional, on-campus students, often as an alternative to filled sections of on-campus courses. However, this cohort of students seems to be the type that is most likely to do poorly in eCore, and advisors at the affiliate schools try various strategies to discourage students to take eCore for this reason. Those who sign up for eCore for this reason are less committed to the concept and far more likely to drop or fail.

Student Orientation and Advising
One schools requires an orientation to on-line learning before students are allowed to enroll in eCore. This is a survey that evaluates student readiness for the commitment to on-line learning.
Some schools require a meeting with a professional advisor for every student who wishes to enroll in an eCore class. These schools stressed very much that there should be absolutely no self-registration or open enrollment for any eCore class. Advisors typically recommend that students attempt no more than two eCore courses per semester, only one if they are working adults.
Faculty Recruitment

AASU and other faculty are invited to teach eCore courses. Faculty need to understand, however, that the basic syllabus and course outlines have been designed already, and new faculty cannot bring a great deal of innovation into the curriculum. Those who are considering should study the extant course outline and decide if it is something that they can buy into. eCore administrators are especially eager to find faculty to teach the already designed history courses.

Faculty Removal

Faculty are evaluated by students and by eCore administrators on a regular basis. The student evaluation forms may be tailored for each course. Administrators check each course to make sure that faculty members fulfill their responsibilities to offer students feedback, on-line discussions, and the like. Faculty who perform poorly are not asked to return; in extreme cases, a faculty member maybe replaced in the middle of the semester.

New Courses

There are no real plans to expand the eCore curriculum, with the exception of ARTS 1100 or MUSC 1100. All recent growth in the program has been through a steady increase in the number of sections of existing courses, and this trend is expected to continue. About 52 sections of eCore classes are planned for Fall 2006. It may be too late for AASU to have seats in the Fall 2006 offerings, since pre-registration will begin soon. If AASU does become an affiliate, it could expect to be allotted 3 or 4 seats in each specific section.

Course Updates

As in her previous responses to my question, Dr. Thompson stated that revisions of textbooks, common every two or three years, require that course developers revise syllabi at least that often. She stated that when eCore courses are taught by more than one instructor, (e.g. POLS 1101), the instructors involved commonly come together in Athens to work through course revisions as a team. However, I did get the impression that meetings like this are not all that common; as before, she mentioned only the meetings concerning the POLS course.

Financial Aid and Retention

eCore courses are treated no differently from other courses for financial aid purposes. In view of the relatively high rates of Fs and Ws, eCore courses actually exacerbate problems of retention, since Ws and Fs are detrimental to HOPE GPAs, Satisfactory Academic Progress standards, and the like.

Tutoring

eCore personnel were very interested in taking advantage of various on-line tutorial services that are available. Some of these have already been collected at websites for Writing Centers and Math Labs at various system institutions, and these could be linked to the syllabi for the eCore courses
Technical Support

Attendees were pleased with improved service at the 24-hour, 7-day technical support webpage. Through various levels and steps on this webpage, students are encouraged/forced to try to answer their question electronically before they may write directly to a staff member. However, we plowed through these levels and tested the system. We received technical help from a staff member within about 30 seconds.

Testing

The group discussed testing issues at some length. Since system policy requires that at least one eCore assignment, usually a midterm and/or a final exam, must be completed in proctored environment, it creates headaches for campus testing offices. AASU already feels some impact from local students who come to the testing center in the Office of Student Affairs to take eCore tests required for other system schools.

If AASU were to become an affiliate institution, and if dozens or more AASU students were required to take exams during a narrow time frame such as finals week, this could put considerable pressure upon the testing office. The testing office may also need to consider offering sessions during evening and weekend hours, since many eCore students cannot come to campus during normal business hours. Most affiliates require a $15-$25 fee for the administration of every test.

Administrative Headaches

Those who attended this meeting, mainly registrar’s office and advisement center staff, focused on the many administrative complications that eCore can bring. Since eCore fees, testing fees, registration dates, starting dates, ending dates, midterm dates, withdrawal dates, attendance policies, and more differ from the norm for the campus, students can overwhelm staff members with questions about their bills, their schedules, and their faraway professors.

eCore vs. Independent and Distance Learning

The same offices that operate eCore also manage the IDL courses. IDL differs from eCore in these ways: IDL offers about 130 different course each semester in a wide range of disciplines, including upper level courses; IDL courses are designed individually by the participating faculty members; students may work independently and do not need to follow the semester calendar; the University of Georgia gets all of the credit for credit hours generated by IDL courses, even if the faculty from other schools. Under eCore, the affiliate institutions get credit for the credit hours.

Academic Dishonesty

The local institution handles cases of academic dishonesty. eCore instructors often use Turn-It-In or similar software.

System Marketing Plans

eCore administrators will launch a more aggressive ad campaign touting the eCore concept, with the slogan “go to college wherever you are.” CSU intends to take these ads and mail them directly to all of their non-traditional students.
AASU Marketing

Note that the forthcoming print version of the AASU Summer/Fall 2006 schedule devotes a paragraph to USG eCore classes and invites students to learn more at www.alt.usg.edu/ecore. The number of AASU who choose these courses (and thus enroll through one of the affiliate institutions) may go up. As indicated below, four AASU students took eCore courses in FY 2005. The data also suggest that AASU might be able to pick up some eCore students from border counties of South Carolina.

eCore Administrators

Ms. Ackerson-Jones and I were both impressed with the expertise among the eCore staff. The people in charge of course design, testing procedures, and registration procedures were eager to help and have quickly provided answers to my questions. Some volunteered to come to AASU to help our staff members learn the procedures, if AASU elects to become an affiliate.

I was a little disappointed that they did not have much hard data to answer some of my questions; in some cases they relied instead on approximations and assumptions.

Additional Questions and Answers obtained after the meeting:

How many AASU students are currently/have recently enrolled in eCore classes through other affiliated schools?

In FY 2005, four AASU students were enrolled in eCore courses – two in summer and one each of the other semesters. They enrolled in 1-3 courses each. Unfortunately I don’t have student demographic data from FY 2006 yet, so this trend may have changed.

-What percent of eCore students come from beyond the Georgia borders?

Depending on the semester, between 6 and 10% of eCore students have listed a non-Georgia state of current residence. However, only 1% of eCore students are listed as non-residents for tuition purposes. Many have waivers for military, border students, etc.

-Is there data to show which majors most likely to see some of their students opt for eCore?

The top 5 reported majors of eCore students for FY 2005 were undecided, nursing, early childhood education, general studies and biology.

-How many students complete the chemistry courses per year, and what majors do they go into?

21 students in FY 2005 completed at least one of the two courses. Majors reported during the semester the course was taken include biology, chemistry, education, IT, speech, psychology and undecided.
Feasibility Study of the Development of an On-line, Off-site General Chemistry Sequence for the University System of Georgia

Submitted by:
Farooq Khan, Andrew Leavitt, Kenneth McGill, and George McKelvy

Submitted to:
Dr. Shary Karlin, Director, Instructional Design and Development
&
Dr. Michael Rogers, Project Manager, Instructional Development
Advanced Learning Technologies
University System of Georgia
August 1, 2002

Recommendation:

A thorough search of current on-line, off-site chemistry offerings revealed that while there are several excellent stand alone lecture courses and a set of uncoordinated laboratory exercises that can be carried out at home, no single offering exists that combines a college-level lecture experience with an at-home college-level laboratory experience. Since the laboratory experience is a crucial component of a college-level chemistry course, the Chemistry Development Team (CDT) recommends designing an on-line, off-site course where a student successfully completing the course would be just as prepared to enter sophomore-level organic chemistry as any student enrolled in the conventional offering of general chemistry.

The goals of this on-line, off-site project should be to: a) provide an equivalent learning experience for on-line students when compared to a traditional format b) increase student satisfaction in science courses, c) increase student enthusiasm for science and science-related careers, d) increase retention in chemistry courses, e) attract minorities and women to the
discipline of chemistry, f) provide faculty development in chemistry and related disciplines, g) and disseminate successfully developed models and materials nationally.

**Practices & Approaches:**

1. Most appropriate practices and approaches to the offering of on-line chemistry labs;

Chemistry labs must

- Teach students to identify common laboratory equipment (e.g. flasks, beakers, buret, etc).
- Teach students laboratory safety and proper laboratory behavior.
- Have an element of discovery. For most of the laboratory assignment students must simply follow instructions. A laboratory assignment is not successful if the student does not make some kind of discovery of the chemical properties of matter. These discoveries can only be made by observing chemical processes.

2. Most promising new developments that may impact the offering or development timeline of on-line chemistry labs;

The World Wide Web has become a ubiquitous component of everyday life. In the past we could not assume students would be familiar with the necessary technology, where now students expect to have an on-line component to their course. With increasing connection speeds, on-line delivery of a variety of lecture and laboratory experiences will increase in depth and sophistication. In addition, there are many lost cost laboratory teaching aids available that can be shipped to students for use in the home. For example, Tanita makes a low cost electronic balance (http://balance.balances.com/scales/1) that can be easily shipped to the student for home use. Texas instruments (http://education.ti.com/product/tech/cbl2/features/features.html) has
created a plethora of low cost chemistry probes that also be incorporated into an at-home chemistry kit.

3. How to build on the successes of others and what to avoid regarding the development and offering of chemistry labs in an on-line and hands-on home environment;

There are many promising aspects for the creation of on-line chemistry labs. Many isolated examples of on-line chemistry labs exist:

http://ir.chem.cmu.edu/irproject/applets/virtuallab/Explanation.asp

http://jersey.uoregon.edu/vlab/Piston/index.html

These examples have not been consolidated into a single collection of experiments. Dr. Rogers assures us that ALT has the resources to duplicate these JAVA based experiments. Hence, it would be a simple matter for the development team to identify these labs and have the ALT team recreate them to suit our needs. Additionally, ALT has already developed successful on-line resources for calculus and physics that can be adapted for use in chemistry.

4. Methods used by other institutions for assessing on-line chemistry courses/labs in relation to face-to-face courses/labs.

It is not certain how best to assess the on-line experience versus the face-to-face experience in chemistry labs. We have suggested there be at least two face-to-face lab experiences (i.e. mid term and final lab exercise). Perhaps this would be a good starting point for assessment of the course. If the same mid-term and final lab exercises were given to on-line students and students in a traditional laboratory setting comparisons could me made between the two groups.

After accessing several models of on-line delivery, the CDT concluded that adaptation of the studio approach would best facilitate the preparation of a student for advancement to the next
level of chemistry. The studio method is traditionally applied in an on-campus setting but could easily be adapted for an on-line, off-site experience.

**The Studio Paradigm**

It is widely recognized that the traditional ways of teaching are losing their effectiveness for a changing student population. Additionally, students of different backgrounds and level of preparedness have a variety of learning styles that are often not utilized when forced to learn only through the traditional lecture format. This results in a lowering of learning outcomes, problems with student attendance and retention, and a general feeling of student dissatisfaction with science courses. Adding to these factors is the increasing need to create new delivery mechanisms to reach a wider constituency through on-line offerings.

Our adaptation of the RPI model for on-line, off-site delivery of the course rests upon four pillars: tutorial, activity, reinforcement, and assessment, as described below. Each asynchronous session will nominally incorporate all four pillars. Each of these pillars is described below.

**Tutorials.** The tutorial (analogous to a brief lecture) can last just a few minutes of introduction to a topic or can be longer to facilitate the in-depth presentation of material. The positioning of the tutorial within the session is variable; a session may begin with a tutorial or an activity. All computer-based methods will be mediated by WebCT, a course management software that delivers courses or portions of courses, *via* the Internet.

**Activities.** The activities (mini-laboratory experiences, or computer-aided exercise) can last from 10 to 15 minutes (demonstrative activity) or up to 90 minutes (sustained activity). Analogous to the tutorial, an activity can be variably placed within a session and could certainly
occur more than once in a session. The key to successfully reducing the time necessary to carry out certain activities is effective organization and procedural adaptation of standard laboratory experiences. Each student will be issued an "activity kit" and will contain all necessary glassware, chemicals, and other supplies required for the activity. Traditional laboratory exercises contain much idle time running down chemicals from shared benches, waiting in lines for balances, and cleaning (in some cases, overcleaning) glassware. Components of the activities will include wet chemistry, web-based activities, spreadsheet, and molecular modeling.

**Reinforcement.** Though reinforcement can occur at any time during the session, a section of time will be set aside for problem-solving. Problem-solving by the students themselves helps internalize difficult concepts and builds critical thinking skills. In occasional instances, the instructor can present an example that delivers new information as a result of working the problem. Self-tests can be used to reinforce problem-solving techniques. Of course, traditional homework will continue to be a major reinforcement component.

**Student Assessment.** The student will be evaluated by a variety of tools such as comprehensive examinations, activity reports, web-based quizzes, homework, and participation. An onsite comprehensive examination (3 hours; twice during the semester) will consist of a traditional written component, in addition, a laboratory practical to ensure that all aspects of student learning are comprehensively examined. Activity reports and web-based quizzes will be due either every session or weekly. The purpose of the quizzes is to assess incorporation of tutorial and activity concepts and to aid students in time management of course materials.
Resources:

1. Commercially available on-line simulations and hands-on chemistry laboratory packages and chemistry textbooks and companion resources that would meet the needs of this course sequence.

There are several publishers that produce textbook packages that include the textbook, multimedia sources, solutions manuals, simulations, and of on-line resources such as quizzing and testing. Prentice Hall, Freeman, and Saunders fit this description. The CDT will set up a table of requirements once the development phase begins and systematically choose the most appropriate textbook and resources.

2. On-line courses with laboratory components in disciplines that include, but are not limited to chemistry (multi-disciplinary or integrated science courses);

There are many Physics laboratories that have overlap with Chemistry laboratories. In fact, ALT own on-line Physics course will likely have many labs that may employed in the Chemistry course.

Acceptance of On-line Concept & Transferability:

1. Listing of institutions of higher education with departments and/or faculty teaching on-line chemistry courses with laboratories;

There are many offerings of stand-alone lecture course but we were not able to locate any course that offered both the lecture and laboratory experience that did not require a visit to a laboratory facility.

2. Investigate the current philosophies of faculty and disciplinary professional organizations in the region, the state, and within the United States regarding the offering of
off-site chemistry laboratory experiences. Determine if there are any common perspectives that would apply to the USG’s chemistry course development projects.

In reviewing philosophies put forth by both the American Chemical Society and the National Science Foundation, any chemistry course that promotes the excitement of the discipline, irrespective of its vehicle of delivery is welcomed and encouraged. The openness of criteria set forth by ACS allows for pedagogical experiment in that they will not discourage the continual development of chemistry course into new media. The NSF offers a grant program, Course, Curriculum, & Laboratory Improvement (CCLI) that calls for such experimentation to take place. More locally, concerns have been expressed as the rigor and quality of an on-line, off-site chemistry experience. The USG Chemistry Advisory Committee (CAC) has previously recommended that such a course not be developed and implemented. The CDT will address this issue by engaging the CAC very early in the development process. We hope that through this engagement, members of the CAC will support the development efforts.

3. Issues relating to the transferability of these courses to other institutions. (For example, what factors are considered to be acceptable for transfer and will these courses meet the prerequisite requirements of major courses that students will take following these?);

It is the plan of the CDT to develop a college-level general chemistry sequence that its learning outcomes would be interchangeable with those of any other general chemistry sequence in the USG. Therefore, this course sequence will be transferable to all 34 USG institutions.

**Laboratory Kits:**

1. Necessary components of a chemistry laboratory kit for home use;
There are two basic components necessary for home laboratory kits. 1) A kit that contains consumables for example, necessary reagents and disposable lab equipment (e.g. pipets, stir bars, etc.). 2) An instrument kit for example, electronic balance and CBL probes.

2. Availability of commercial chemistry laboratory kits and sources;
Flinn Scientific has shown interest in creating the consumable portion of the home laboratory kit. Vernier Software & Technology already has a chemistry package that includes the probes and over 30 laboratory exercises that can make up the instrument kit.

**Legalities & Safety:**
Since issues related to legality and safety varies greatly from state to state, no useful information was obtained from our web-based research. All matters related to these topics will be referred to USG for comment. Dr. McKelvy has considerable expertise in the area of chemical safety and will serve as a resource person in the development phase of the project. It will be our practice to insure that all materials used in the home-based laboratory kits be disposable in ordinary kitchen refuse. However, we realize that the final word on issues related to legality and safety lie with USG.

**Course Concept, Design & Development:**
1. The best proportion of hands-on to simulated lab experiences;
   Based upon prior teaching experience, a 50:50 hands-on to simulated lab experience will be attempted. This ratio may change during the development process.
2. Identification of development team membership composition (roles and expertise);
   Prof. Ken McGill - Activity & Reinforcement Development
Prof. George McKelvy - Activity & Reinforcement Development

Prof. Farooq Khan - Tutorial & Assessment Development

Prof. Andrew Leavitt - Tutorial & Assessment Development

3. Time frame to complete course sequence and whether both should be developed simultaneously or in sequence;

CHEM 1211K - Development begins in August 2002 and ends in July 2003. The course will be offered on-line in fall 2003.


During the initial offering of CHEM 1211K in fall 2003, we will work with the instructor to receive instantaneous feedback while completing the second course, CHEM 1212K.

4. Content development – Should we develop our own, purchase existing materials or combination;

After careful survey of existing materials, the CDT concludes that all materials related to the CHEM 1211K & 1212K sequence should be developed. Two major exceptions to this would be the textbook package and a commercially assemble home-based laboratory kit.

5. Additional Literature Review for Student Perspective (conducted under the supervision of Dr. McKelvy by Mandy Thompson);

Sites Analyzed:

http://scholar.hw.uk/heriotwatt/scholar/env/scholarlogin.asp

http://www.scidiv.bcc.ctc.edu/wv/101-on-line.html

http://carbon.cudenver.edu/~gweaver/classes/chem2031050_F98_intro.html

http://courses.chem.utah.edu/coursesmain.html
Details about each site:

http://scholar.hw.uk/heriotwatt/scholar/env/scholarlogin.asp

- This site was the most comprehensive site visited.
- Each chapter was presented in a thorough manner and had several self-check quizzes and questions within the reading that provided the student with interactive learning and reinforcement.
- Information was provided in a concise manner. The reading was fluid and easily followed.
- Simulations and demonstrations were provided to illustrate topics. These were interesting and sometimes more elaborate than examples given in class.
- Following equations for reactions became difficult on-line. Without having someone explain the steps and reactions while completing the equation made it a little more difficult to follow.
- Each chapter had a test that consisted of questions in various forms including free response, fill in the blank, and multiple choice.
- There was not an interactive portion to this site, like on-line office hours. Students were instructed to see TA in order to proceed with labs or with questions.

http://courses.chem.utah.edu/coursesmain.html

- Several courses offered including introductory chemistry and higher-level chemistry courses.
• Most sites used power points to provide lecture material.

• A few professors provided lectures on video through the use of mediaplayer. This is only useful if the student is on a DSL or better Internet connection.

• Quizzes were available on-line, but students could only take quizzes that corresponded to the material that was covered during the current week. This encouraged students to keep up with material because quizzes became unavailable after a deadline.

• All on-line courses required the student to take at least one proctored midterm and final.

http://carbon.cudenver.edu/~gweaver/classes/chem2031050_F98_intro.html

• This was the only site viewed that required students to come on campus and complete actual lab procedures. Students were required to attend lab for 8 hours every other Saturday. They completed a total of 14 labs during the semester.

• All course material was available on-line and videotape lectures were available for all students through the library.

• On-line tutorial and office hours were available for students.

• The professor would post quizzes on-line and students sent response via email to the professor.

• Chat rooms were available for students to discuss problems and material.

http://www.ulaverne.edu/~natsci/chem/c103/syllabus.html

• Students were merely required to read textbook and complete required assignments.

• A TA proctored exams during a given week.

• This course had KITCHEN LAB assignments that were submitted via email.
http://www.scidiv.bcc.ctc.edu/wv/101-on-line.html

- This course was taught entirely on-line with course materials and lab information being provided over the Internet.
- Students used kitchen labs to complete exercises.
- Quizzes and test were not proctored and were posted on web sites during a given period.
- All course work had deadlines for submission and completion.
- All work was submitted via email.

Most Useful Features

On-line Office Hours- Allows students to ask TA or Professor questions. In absence of a physical lecture period, this opens a channel of communication for students to reach the professor. This is also more instantaneous. The Professor or TA should be available during a designated period to respond quickly.

Deadlines on quizzes/labs/tests- this keeps students up to pace and prevents falling behind. Responsibility and self-control are important when taking an on-line course, but this aids in preventing disaster.

Physical Lab Meetings on campus- Courses without a physical lab meeting should not be considered chemistry. Most of the courses that I researched were for non-science majors. They wanted to teach basic chemistry, but leaving out physical labs excludes an important aspect of chemistry experimentation.

Proctored Exams- At least one exam should be taken in a classroom environment; this would test real knowledge and understanding of what had been covered.
Chat rooms for group discussion and postings- another good forum for communication and learning. If there is no physical lecture there is not time for students to ask one another about material. I always asked as many students as possible about a question before approaching my TA or Professor.

Video simulations- Helped replace illustrations by Professors and explained concepts further. Some were more detailed and elaborate than white board drawings.

Self-check quizzes/exercises- Gave necessary feedback to student to let them know they have grasped a concept and can move on.

Removal of pack model of laboratory behavior- In traditional laboratory environments there will generally be a lead student that the rest will naturally follow. Instead of each student performing the experiment and making their own discoveries they look across the bench and simply mimic what the rest are doing. In an online version of the laboratory there is no bench to look over. Every student is on their own and must be prepared to do the experiment for himself or herself.

Built-in ADA support- Due to better health care and societal awareness we are seeing more students with learning disabilities in higher education. Many students require more time for tests and laboratory exercises. Traditional laboratories in most institutions are at peak performance and can be very unforgiving to students in need of more time. Online/at-home laboratory exercises allow all students to be in the comfortable surroundings of their own home with all the time they can find to perform the exercise.
Grade Distribution for All ECORE Courses

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### Grade Distribution of Comparable Courses Taught by GSW Faculty

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### Grade Distribution of Comparable Courses Taught by GSW Faculty

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