BUSINESS, MATH, SCIENCE, AND TECHNOLOGY DIVISION

Introduction

The Business, Math, Science and Technology (BMST) Division consists of five academic departments: Applied Technologies; Biology; Business; Mathematics; and Science, Engineering and Architecture, as well as Learning Assistance Services. Within the BMST Division, three degrees are offered: Certificate, Associate of Science, and Associate of Applied Science. The distribution of degrees is as follows:

Applied Technologies Department

Computer Information Technology (CIT) – Networking	AAS
Computer Information Technology (CIT) – Web Development	AAS
Computer Science	AAS
Cyber Security *(**A Hudson Valley Educational Consortium offering**)*	AAS
Electrical Technology – Telecommunications	AAS & Cert.

Biology Department

Jointly Registered Teacher Education Program (JRTEP) (Liberal Arts and Science) *(**This degree has concentration areas, some of which are in Biology)*	AS
Liberal Arts and Science / Mathematics & Natural Science	AS

Business Department

Accounting	AAS & AS
Accounting Procedures	Cert.
Business Administration	AS
Business Management	AAS
Business Studies	Cert.
Clerical Office Assistant	Cert.
Marketing	AAS
Medical Office Assistant	Cert.
Office Technologies	AAS

Mathematics Department

Jointly Registered Teacher Education Program (JRTEP) (Liberal Arts and Science) *(**This degree has concentration areas, some of which are in Mathematics)*	AS
Liberal Arts and Science / Mathematics & Natural Science	AS

Science, Engineering and Architecture Department

Architectural Technology	AAS
Engineering Science	AS
Liberal Arts and Science / Mathematics & Natural Science	AS

In addition to the Division's degree programs, the Mathematics, Biology, and Science, Engineering & Architecture Departments provide offerings that meet SUNY General Education requirements. All BMST departments provide service courses in support of degrees in the Health Professions and Liberal Arts Divisions. Through rigorous academic offerings, students build foundations in business and science, technology, engineering and mathematics (STEM) areas, all critical to the economic health and growth of our county, region and country.

Relevancy of course content and currency of skills and techniques used in industry are critical to the success of the AAS degree programs in the Division. Cyclical program reviews and regular input from program advisory boards ensure degree program offerings are current. Keeping pace with technological and software changes in the workplace is imperative. To that end, the Division has twelve specialized computer labs, each outfitted with discipline-specific software applications.

The next steps in updating academic technology are: identifying computer technology and projection needs for labs and implementing a plan to outfit labs accordingly; identifying a standard for academic technology for classroom instruction and implementing a plan to outfit rooms accordingly; with the knowledge that a new Windows system is forthcoming, work collaboratively with ITS to develop a plan for PC or laptop replacements for academic faculty and staff.

The Division has made great strides in adopting the College's course management system (currently Angel). More and more faculty are enthused about the effectiveness of using this technological tool, students appreciate these asynchronous course resources, there is a resultant reduction in paper handouts produced by the College and the College is keeping pace with educational trends.

The vast majority of BMST course offerings take place in Harriman Hall, Horton Hall, Hudson Hall, Bio-Technology Building and the Tower Building in Newburgh. Within them, the BMST departments have twenty-nine specialized labs (including the twelve aforementioned computer labs). Other dedicated spaces include a seminar room (in the Business Department), two study reinforcement centers (Math Resource Room and BATCAVERN), greenhouses, educational gardens, and several informal learning spaces for students. Within the next five years, College plans call for the opening of Kaplan Hall in Newburgh, and the design of a new Science & Technology Building for the Middletown campus; projects that will greatly impact and improve the teaching and learning facilities throughout the BMST Division and provide opportunities to expand course offerings.

A new building on the Middletown campus would be very welcome given the current spatial constraints that the Division faces: during prime time (i.e. 9:00 am to 2:00 pm) there are no available classrooms for additional sections of courses; there is no space available for additional faculty offices; there is no space available for new informal learning spaces; facilities appear tired; inconsistent furniture and aesthetics exacerbates the image problem. The BMST Division must identify aging classrooms and prioritize them for a furniture replacement plan and upgrades.

In early efforts to manage the increased numbers of under-prepared students, the Mathematics Department has taken an active leadership role on the Developmental Oversight Team (DOT) and in dialogue with local high schools. Looking ahead, BMST concern for underprepared students underlies the need for each department/discipline to work collaboratively with Learning Assistance Services to design the best model of academic support possible for students in each discipline (e.g. online learning modules and support; regularly scheduled group study sessions; open, manned lab hours, etc.). In addition, discipline-driven Learning Community offerings will take on more importance.

Strategies that lead to student success and bolster preparedness must be shared and replicated. Through the College-wide administration of student satisfaction surveys in AY 2008-2009 and 2009-2010, data is available regarding student engagement in educational activities and active, collaborative learning strategies. Awareness of the effectiveness of these strategies presents an opportunity for a Division-wide dialogue on exemplary practices and shared dialogue on what works well for BMST content areas.

Under the broad umbrella of communication is advising students and providing clear, accurate and timely information. Communication between the Advising Center and academic departments is crucial for effective academic advising. Departmental websites are key access points for reliable, accurate and timely information about BMST courses, programs, and offerings.

Student club participation and endeavors have long been strengths in the BMST Division. Informal learning, community building and exposure to new experiences must be maintained and fostered. Faculty participation in such activities will continue to be encouraged and rewarded.

While each department or discipline is different and necessarily has distinct professional development needs in order to keep current, common professional development concerns across the BMST Division can be addressed together. For our adjunct faculty, it is important for the College to support mentorship of them to ensure consistency of content in multi-section courses and academic standards.

Taking cues from employers for whom our students will work and institutions to which our students will transfer, the BMST Division will adapt to changing conditions while maintaining rigorous academic standards and supporting students as they reach for their academic goals.

A College-wide baseline of sustainability content has been established (Summer 2010) to which a comparison can be made in the future. Over the course of the next five years, BMST Division departments will be involved with the development of an interdisciplinary course on Sustainability; broaden access to Internships, and in turn, broaden access for our students to local industry; expand business, math and science offerings at the Newburgh campus that lead to AS degrees there; explore new degree programs for both campuses; provide online and hybrid offerings that serve students whose schedules do not permit them to take all their classes at either campus. Pedagogic professional development focused on exploring and sharing successful techniques for engaging students is on the horizon as well as effectively utilizing technological tools for communication and delivery.

Underlying all plans for the future is the premise that a healthy full-time to part-time ratio for faculty has been reached and maintained to ensure responsible growth in offerings, ongoing curricular development, and increased student support. The goal for the BMST Division in the next five years is a 60% full-time to 40% part-time ratio.

➢ CURRICULUM DEVELOPMENT

- ❖ Maintaining currency
- ❖ Responding to industry standards
- ❖ Establishing a baseline of sustainability offerings
- ❖ Identifying and prioritizing sustainability initiatives
- ❖ Fostering an atmosphere of adaptation and openness to change
- ❖ Identifying new and emerging career and transfer opportunities and develop, where practical, corresponding curricula
- ❖ Using the campus as a laboratory

Each department in the BMST Division has specific curricular goals and emphases for the next five years (see below).

Applied Technologies

- Anticipate increased enrollment in AAS – Cyber Security and possible corresponding decrease in CIT-Networking enrollment. The department needs to be poised to make adjustments according to student demands and interest. Flexibility and versatility of faculty is critically important.
- Delete AAS – CIT-Web Programming program. Maintain web programming courses on books so as to have the flexibility to offer them as electives and/or service courses on a rotating basis in the future.
- Continue to increase the focus on renewable energy/green technologies in ET/Telecommunications degree.
- Develop "tracks" or specialization within the ET/Telecommunications degree (solar technology, bio-medical equipment technology), manage internship and market degree accordingly.
- Introduce gaming and other popular programming topics into long-term projects within the lab component of the Computer Science degree-specific coursework.

- Anticipate and engage in opportunities to collaborate with other departments on interdisciplinary projects (such as the Sustainable Bus Stop in AY 2009-2010).
- Create an opportunity to design a department-wide interdisciplinary project that includes aspects of Electrical Technology, Telecommunications, Networking, Data Communications, Computer Programming, data analysis and public presentation of work.
- Maintain currency in all degree programs by performing content review every three years. Perform ongoing, annual, collaborative, objective review of courses taught by multiple instructors.
- Explore the workplace demand for Certificates in Networking, Cyber Security, and Biomedical Equipment Technology.
- Work with AVP to determine which, if any, courses will be offered in a new facility and plan labs and instructional space accordingly.
- Provide service courses on Newburgh campus to support degree offerings.
- Coordinate with Hudson Valley Educational Consortium on offerings.

Biology

- Participate in sustainability-related offerings.
- Continue exploration of restructuring Introduction to Biology and Human Biology so as to provide a distinct introductory General Education science course and a distinct preparatory course for the Anatomy & Physiology course sequence.
- Identify faculty, and search for new, to offer Biology courses to support degrees and programs at Newburgh campus. Increase offerings at Newburgh to support the AAS – Nursing and AA - Liberal Arts and other identified degree programs.
- Identify which credit-bearing courses will be offered on a regular basis in the new greenhouse facility. Expand non-credit offerings in collaboration with local partner organizations. Restore: greenhouses, one to be a combination teaching/lab facility, the other a traditional greenhouse offering automatic heat, humidity, ventilation control, allow for development of cell culture/transgenic/PCR facilities in conjunction with development of the Botanical Center. This also provides an opportunity to link with "GREENR" (Global Reference on the Environment, Energy, and Natural Resources) network.
- Collaborate with Architectural Technology to develop a Landscape Design/Architecture program at Newburgh.
- Collaborate with Criminal Justice on the development of a Forensics course.
- Collaborate with SUNY New Paltz on a 2+2+2 Physician's Assistant program.
- Conduct ongoing review of course objectives and outcomes on a regular basis. Perform ongoing, annual, collaborative, objective review of courses taught by multiple instructors.
- Usher Avian Biology through the internal Curriculum Committee to obtain approval to offer the course as a General Education science course.
- Plan impact of new Science & Technology Building in Middletown. Work with AVP to determine which courses will be offered in a new facility and plan labs and instructional space accordingly.

Business

- Manage programs on two campuses. Re-evaluate the original planned offerings at Newburgh. Plan business offerings based upon student numbers in existing degrees and student demand along with demand from industry. Coordinate with science and math departments to ensure offerings to support new programs will be met.
- Identify new and emerging trends in Business (e.g. operating web-based businesses, impacts of "green" and sustainable business practices). Propose new Business-related degree offering at Newburgh.
- Regularly assess outcomes of courses and degrees to ensure ASBSP accreditation and alignment with industry standards. Incorporate industry-driven content into coursework per recommendations from Advisory Boards, employer surveys, graduate surveys, and accreditation bodies.
- Keep pace with industry-driven software updates.
- Participate in SUNY transferability dialogue to ensure seamless transfer within the SUNY system for our students.
- Monitor demand for Keyboarding and web-based computer operations for business. Adjust emphasis accordingly.

Mathematics

- Utilize technological tools for support and reinforcement of mathematical concepts.
- Regularly review (department wide) Gen Ed courses to ensure objectives are being met; adjust content reinforcement according to findings.
- Review content of Technical Math 1 with faculty from Architectural Technology to ensure content relevancy and student preparation for discipline-specific courses.
- Advocate and plan for mathematics courses to become part of Learning Communities.
- Coordinate offerings at Newburgh with degree program needs.
- Expand on the Summer Immersion for students who place into developmental math courses or who receive a "Hold" in a spring section of a developmental math course.

Science, Engineering and Architecture

- Identify faculty, and search for new, to offer Chemistry and Physical Science courses to support degrees and programs at Newburgh campus. Increase offerings at Newburgh to support the AAS – Nursing and AA - Liberal Arts and other identified degree programs.
- AAS - Architectural Technology program to increase the emphasis on green building design practices. The 2010 model of the "Sustainable Bus Stop" might be used for future projects.
- AAS - Architectural Technology program to introduce and reinforce the use of BIM (Building Information Modeling) in coursework.
- Align content and outcomes of Engineering 1 with similar courses in the SUNY system (part of the SUNY transferability initiative). Also more closely align delivery of Engineering 1 in New Visions and on campus.

- Coordinate regularly and in an ongoing manner with programs for which science courses serve as service courses (Medical Laboratory Technology, Nursing, Dental Hygiene, and Engineering).
- Explore offering Astronomy as a hybrid course. Information gleaned from experiments with recent day sections and student borrowing of telescopes (underwritten by CTL Innovation Grant) to be used.
- Through regularly scheduled reviews, ensure that multi-section courses that have multiple instructors have consistent content and outcomes. Perform ongoing, annual, collaborative, objective review of courses taught by multiple instructors.
- Explore the development of a new introductory science focusing on earth and geological science content.
- Develop a new or transform an existing course that is focused on the science of energy.
- Plan impact of new Science & Technology Building in Middletown. Work with AVP to determine which courses will be offered in a new facility and plan labs and instructional space accordingly.

Learning Assistance Services

- Continue collaboration with academic departments and the Student Services Division for improvement of academic support and ease of access to programming associated with the Summer Institute and first semester Learning Communities for students who have placed into developmental courses and to participate in development of initiatives such as 20-hour intervention for DVH grade and evening Summer Institute.
- Partner with librarians and academic department chairs and faculty to develop an information literacy support student/tutor initiative for designated courses.
- Work with the department chairs of AAS programs to develop customized tutoring and learning assistance for majors.
- Focus on improved college study skills for gateway courses. The idea is that enhanced active learning and critical thinking will help students in the pre-Allied Health areas to be better prepared when they get to the AAS programs.

➢ STUDENTS

- ❖ Advising
- ❖ Extracurricular activities
- ❖ Learning Assistance initiatives
- ❖ Library support
- ❖ Retentions initiatives

The BMST Division is committed to supporting students both within the classroom and outside via clubs, structure for supplemental study, sponsorship of competitive academic ventures, and a wide array of enrichment activities and learning opportunities. The Division will continue all, and seek new, strategies that foster student growth for the foreseeable future.

Applied Technologies

- Maintain open lab hours for use by students.
- Develop a Learning Assistance Plan in collaboration with LAS to target struggling and under-achieving students and increase retention and academic success.

Biology

- Take lead on advising students who wish to major in or study Environmental Science.
- Continue to offer and rotate summer field study coursework (include opportunities for HS students).
- Via an Interdisciplinary Internship course, place interested and motivated students in internships related to their career goals.
- Clarify departmental policies regarding student research projects. Identify courses and opportunities and develop clear guidelines for conducting research.
- Regularly schedule end of semester Review Sessions.
- Work in collaboration with Allied Health department chairs to articulate the circumstance by which college-ready Allied Health students document satisfactory preparation to enter the Anatomy & Physiology sequence.
- Develop a Learning Assistance Plan in collaboration with LAS to target struggling and under-achieving students and increase retention and academic success.
- Continue to sponsor clubs and their field trips.

Business

- Work with Learning Assistance to develop discipline-specific support and house support materials in department labs.
- Develop a Learning Assistance Plan in collaboration with LAS to target struggling and under-achieving students and increase retention and academic success.
- Plan and publish a multi-semester guide to all Business degrees (at Middletown, Newburgh and online) course offerings for students to use as planning tools.
- Continue to sponsor clubs and student exposure to business practitioners through lectures, presentations and field trips.
- Seek exciting and challenging placement for student internships.

Mathematics

- Staff the Math Resource Room with a full-time staff member to ensure consistent and predictable support for students.
- Staff the Math Resource area in Newburgh with a part-time staff member to ensure consistent and predictable support for students.
- Develop a Learning Assistance Plan in collaboration with LAS to target struggling and under-achieving students and increase retention and academic success.
- Continue mentorship of students and foster participation in math competitions and related clubs.

Science, Engineering and Architecture

- Architectural Technology: Publish a three-year or year-round sequence of courses for students to use as an advising guide.
- Support field trips to ensure hands-on and immersion experiences (e.g. visit to wastewater treatment plants, construction sites, new buildings, geological formations, etc.).
- All department disciplines to develop a Learning Assistance Plan in collaboration with LAS to target struggling and under-achieving students and increase retention and academic success.
- Continue to sponsor clubs and opportunities for student exposure of science, engineering and architectural topics through lectures, presentations and field trips.
- Continue access for students to Continuing Education Units for local professionals.

➢ UNDER-PREPARED STUDENTS

- ❖ Dealing with increasing numbers while maintaining standards
- ❖ Fostering proven initiatives (Block schedules, Learning Communities, etc.)
- ❖ Clear communication between disciplines re: expectations and abilities of students
- ❖ Expanding support for under-represented and at risk students

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During the 2009-2010 academic year, the BMST faculty identified under-prepared students as their top concern.

Applied Technologies

- Work with Learning Community planning entity (i.e. the DOT) to incorporate a computer technology offering into a discipline-specific Learning Community core. Computer Literacy and/or Computer Applications and Graphics should be targeted to be part of a career-oriented Learning Community to provide support to under-prepared students who wish to pursue technology-related degrees.
- Periodically solicit feedback from English department on skills levels of students in developmental reading and writing courses to ensure faculty expectations are in line with student skill levels.
- Consider using existing models (Mathematics and Biology) or develop a unique model for end-of-semester review sessions.
- Explore options for mid-semester review sessions for students in academic trouble.

Biology

- Continue to support and enhance the BATCAVERN facilities and resources in Middletown.
- Enhance and bolster BATCAVERN facility in Newburgh.
- Work with Learning Community planning entity (i.e. the DOT) to incorporate a Biology offering into a discipline-specific Learning Community core. The included

course would be for under-prepared students who wish to pursue Allied Health-related degrees.
- Anticipate demand for science courses on the "permitted courses" lists. Solicit feedback from English and Mathematics departments on skills levels of students in developmental reading, writing and math courses to ensure faculty expectations are in line with student skill levels.
- Explore options for mid-semester review sessions for students in academic trouble.

Business

- Work with Learning Community planning entity (i.e. the DOT) to incorporate a business offering into a discipline-specific Learning Community core. Introduction to Business and/or Business and Society should be considered for inclusion in a career-oriented Learning Community to provide support to under-prepared students who wish to pursue business-related degrees.
- Anticipate demand for business courses on the "permitted courses" lists. Solicit feedback from English and Mathematics departments on skills levels of students in developmental reading, writing and math courses to ensure faculty expectations are in line with student skill levels.
- Consider using existing models (Mathematics and Biology) or develop a unique model for end-of-semester review sessions.
- Explore options for mid-semester review sessions for students in academic trouble.

Mathematics

- Develop a comprehensive plan for offerings and support for students who have under-prepared skills (pre-semester immersion, post-semester immersions, full-time staffing of Math Resource Facilities, intensive support for students who receive U grades, end-of-semester review sessions, and utilization of asynchronous technological tools).

Science, Engineering and Architecture

- Work with Learning Community planning entity (i.e. the DOT) to incorporate a science offering into a discipline-specific Learning Community core. The included course could be for under-prepared students who wish to pursue Allied Health-related degrees or could be a supported offering for students needing a General Education science course.
- Anticipate demand for science courses on the "permitted courses" lists. Solicit feedback from English and Mathematics department on skills levels of students in developmental reading, writing and math courses to ensure faculty expectations are in line with student skill levels.
- Consider using existing models (Mathematics and Biology) or develop a unique model for end-of-semester review sessions.
- Explore options for mid-semester review sessions for students in academic trouble.

Learning Assistance Services

- Streamline the developmental review process via development of Banner reports such as identification of students meeting criteria for exiting the program.

➢ TECHNOLOGY

- ❖ Regular replacement and maintenance plan
- ❖ Ensuring instruction meets industry standards
- ❖ Providing Angel Shells for course utilization

The College has made strides in equipping most lecture classrooms with internet service, computers and projection technology. Equipping labs throughout the BMST Division with instruction technology is a logical next step. Inextricably related to technological changes is the need to provide training for faculty in order for them to most effectively utilize classroom technologies.

Applied Technologies

- Staying current with computer technology changes are of paramount importance to this department.
- Ensure all second, third and fourth semester courses in department degrees are web-enhanced required.
- Explore feasibility of hybrid offerings. Identify appropriate courses and implementation plan.
- Prepare regular replacement plan for computer labs and software updates. BT 115, 117, 121, 253, 255, 357 to be included in computer replacement plan.

Biology

- Move toward permanent SMART technology in labs (i.e. switch from a mobile fleet of SMART carts to equipping labs with computer and projection equipment).
- Procure and train faculty to utilize a fleet of Elmo projectors for use in classrooms and labs.
- Increase the number of courses that have web enhancements.
- Explore feasibility of hybrid offerings. Identify appropriate courses and implementation plan.
- BATCAVERN to be included in computer replacement plan.

Business

- Increase hybrid course offerings. Provide leadership to other departments on pedagogical and scheduling exemplary practices for the hybrid format.
- Prepare regular replacement plan for computer labs and software updates. HA 210, 212, 215, 217 to be included in computer replacement plan.
- Effectively utilize classroom technology (SMART stations, etc.).

Mathematics

- Encourage utilization of Angel Shells.

- Familiarize faculty with and encourage them to encourage students to utilize asynchronous technological tools.
- HA 309 to be included in computer replacement plan.

Science, Engineering and Architecture

- Increase the number of courses that have web enhancements.
- CAD lab (BT 355) upgrades must be timed to Autocad (i.e. industry standard software) upgrades and associated computer requirements.
- Equip labs with computers, internet access and projection equipment.
- Identify rooms appropriate for SMART board (and other instructional technology) use.
- BT 355 to be included in computer replacement plan.

Learning Assistance Services

- Collaborate with academic departments to ensure that learning assistance support is meeting the needs of specialized academic areas. Identify specialized technology within identified courses with which students may need support.
- Collaborate with instructors, librarians and coordinator of instructional technology to develop ways to assist students in identified courses to access online resources for purposes to include development of learning skills, online research skills (*i skills*), maneuvering in Angel and mastery of the College information system.
- Establish web-enhanced tutor training opportunities.
- Research and implement report functions of our Tutortrac learning center management software for:
    - Tracking students who have placed into two or more developmental courses
    - Program assessment for Learning Assistance Services

➢ FACILITIES

- ❖ Equipment (establish a baseline then a regular replacement plan)
- ❖ Furniture/furnishing (establish a baseline then a regular replacement plan)
- ❖ Space (instructional space, storage space, office space, recognition that new buildings will have major impact, informal learning space for students)

Early and preliminary planning discussions have taken place regarding a new Science & Technology Building for the Middletown campus. This building would have a major impact on the BMST Division. Each department in the BMST Division would either move into a new building or be heavily impacted by space allocations in the existing buildings (Harriman Hall and Bio-Technology Building). As the planning for a new building mounts, this section of the AMP will surely be revised mid-stream.

Aging capitol equipment is also a concern in the BMST Division. Because of the specialized and therefore expensive nature of science and technology equipment, academic year 2010-

2011 will be used to identify equipment in need of replacement and prioritize a schedule for that replacement. Departmental plans thereafter will reflect this prioritization.

Applied Technologies

- Shift away from a fleet of projection carts to permanently installed projection equipment in labs.
- Renovate BT 121 to add one more row of computer stations (for a total of XX stations in the room). Also provide a U-shaped counter and appropriate electricity at rear of room for use by Computer Hardware and Maintenance course.
- Renovate BT 115 so as to accommodate the hands-on nature of Computer Hardware and Maintenance courses as well as other CIT courses.
- Identify aging capitol equipment and prepare a prioritized sequence for replacement.

Biology

- Renovation of the greenhouses will impact offerings (see Curriculum Development section above).
- Develop a strategic plan/master schedule of all existing labs and associated courses. Identify necessary equipment needed to maximize usage of labs and increase high-demand course offerings.
- Identify aging capitol equipment and prepare a prioritized sequence for replacement.

Business

- Upgrade instructional technology in Harriman Hall to keep pace with industry standards.
- Identify space to be allocated to Business faculty offices.
- Move toward developing a second "seminar-type" instructional space such as HA 203.

Mathematics

- Math Resource Room has outgrown its current location. Identify space to expand.
- Identify space to be allocated to Mathematics faculty offices.

Science, Engineering and Architecture

- Replace drafting tables in BT 353.
- Install curtain system to darken BT 355 (CAD lab) to enhance projection during day sections.
- Hire a part-time lab assistant to maintain and order science equipment, supplies and collections and to prepare labs.
- Identify aging capitol equipment and prepare a prioritized sequence for replacement.

Learning Assistance Services

- Improve the professional appearance and efficiency of the Tutorial Reception Area with Tutorial Center sign(s) and updated desk system furniture. Part of this is to prepare a list of all equipment, furnishing and furniture with a replacement date and cost associated with them.

➢ PROFESSIONAL DEVELOPMENT

- ❖ Technology training
- ❖ Using CTL to address needs identified in AMP
- ❖ Fostering an atmosphere of collaboration (e.g. Interdisciplinary endeavors)
- ❖ Adjunct and new faculty mentoring and support

As computer technology continues to change at a rapid pace, so does instructional technology. It is imperative that the College provide training to faculty in order to ensure effective use of instructional technology.

In the BMST Division, mentoring and monitoring adjuncts is currently very department-specific. For the most part, this system works and relies on persons who are identified as responsible for adjunct mentoring to train and mentor new adjunct faculty. It is important to identify broader (i.e. pedagogical or classroom management) issues that impact adjunct instructors and provide support and mentorship for them.

Applied Technologies

- Faculty to obtain or maintain certifications in computer technology. Currency is vital to this department.
- Mentor adjunct faculty.

Biology

- Take the lead on training faculty in other departments on active learning strategies.
- Provide a forum for faculty who attend discipline-specific and pedagogically-oriented conferences, take graduate coursework or explore industry conditions to share findings, ideas and have dialogue within the department.

Business

- Provide a forum for faculty who attend discipline-specific and pedagogically-oriented conferences, take graduate coursework or explore industry conditions to share findings, ideas and have dialogue within the department.

Mathematics

- Train faculty to web-enhance courses.
- Train faculty to utilize asynchronous math skill development software.

- Provide a forum for faculty who attend discipline-specific and pedagogically-oriented conferences, take graduate coursework or explore industry conditions to share findings, ideas and have dialogue within the department.

Science, Engineering and Architecture

- Architectural Technology – Faculty to stay current with industry standards (proprietary software and freeware, developments and advances in building materials). Currency is vital to this program.
- Faculty to be trained in effective use of classroom and asynchronous technology and trends in communicating with students.

Learning Assistance Services

- Research feasibility of and plan for offering professional tutors a stipend for period of work rather than pay by the hour for sessions scheduled with tutees.
- Incorporate learning coach strategies into tutor training sessions beginning with FLO tutors as part of Learning Communities.

➢ ACCESSIBILITY OF OFFERINGS

- ❖ Web-enhancement and hybrid opportunities
- ❖ Non-traditional offerings (e.g. block schedules, accelerated courses, late start, etc.)
- ❖ Information literacy (also writing and critical thinking) infused throughout academic experiences

Applied Technologies

- Participate and collaborate in scheduling non-traditional offerings. Use demographic data to determine feasibility of non-traditional offerings of degrees.
- Participate in College-wide discussions on information literacy and critical analysis by students. Periodically review CIT 100 – Computer Literacy delivery and content.
- Increase internship opportunities.

Biology

- Continue wide variety of selection, offerings and course times at locations and in various formats (DL, hybrid, web-enhanced, etc.).
- Participate in development of interdisciplinary internship opportunities.
- Participate in College-wide discussions on information literacy and critical analysis by students.

Business

- Increase internship opportunities.
- Increase online and hybrid offerings (see Curriculum Development).
- Participate and collaborate in scheduling non-traditional offerings.
- Participate in College-wide discussions on information literacy and critical analysis by students.

Mathematics

- Continue wide variety of selection, offerings and course times at locations and in various formats.
- Participate and collaborate in scheduling non-traditional offerings.
- Participate in College-wide discussions on information literacy and critical analysis by students.

Science, Engineering and Architecture

- Participate and collaborate in scheduling non-traditional offerings.
- Increase internship opportunities.
- Participate in College-wide discussions on information literacy and critical analysis by students.

➢ COLLABORATION & PARTNERSHIPS

- ❖ Interdisciplinary collaborations
- ❖ Strengthen and augment internship opportunities and service learning opportunities
- ❖ SUNY transferability
- ❖ Articulation agreements
- ❖ K-16 initiatives
- ❖ AA and Student Services working together on initiatives
- ❖ Connections and bridges between AA and CAPE
- ❖ Connections with local industries

It is so important to have dialogue and exchange externally. External dialogue provides a yardstick by which college personnel can measure trends, workforce needs and expectations, ensure transferability, and learn about what works and doesn't work at other institutions and why.

Collaborations and partnerships are already strengths of the BMST Division. It is important to maintain our relationships with other institutions and to seek strategic ways to increase or improve collaborations and partnership (e.g. via partnering on grants and the Hudson Valley Educational Consortium).

Applied Technologies

- Participate in interdisciplinary projects and offerings.
- Increase articulation agreements.
- Increase internship and relationships with area employers.
- Develop relationships with high school and workforce development agencies.
- Coordinate with CAPE to provide complimentary offering and portability (i.e. articulation agreements on skills courses).

Biology

- Maintain and perhaps increase CCHS offerings (including New Visions). This will require an internal coordinator within the department.

- Continue participation in SUNY Purchase STEM Bridge program.
- Pursue articulation agreements with baccalaureate granting institutions that will benefit students.

Business

- Continue CCHS offerings.
- Continue participation with SUNY New Paltz Community College Board.
- Participate in SUNY transferability dialogue.
- Participate in development of Interdisciplinary offerings (internship, sustainability) to ensure math skills reinforced.
- Maintain and expand relationships and articulation agreements with upper division schools.
- Maintain active Advisory Board to provide valuable insight into industry standards and changes.
- Maintain and expand relationship to High School Academies.

Mathematics

- Continue CCHS offerings.
- Continue participating in Faculty Exchange dialogue.
- Continue active dialogue with BOCES.
- Continue participation with SUNY New Paltz Community College Board.
- Participate in SUNY transferability dialogue.
- Participate in development of Interdisciplinary offerings (internship, sustainability) to ensure math skills reinforced.
- Sponsor middle school or high school Math competitions.

Science, Engineering and Architecture

- In conjunction with Mathematics department, hold science competitions for MS or HS students.
- Continue participation in SUNY Purchase STEM Bridge program.
- Participate in Faculty Exchange dialogue.
- Update and establish articulation agreements with upper division schools for AAS – Architectural Technology program and AS – Engineering Science program.
- If Architectural Technology enrollments increase, split fourth semester into tracks (one for those who wish to transfer, one for those who wish to enter the workforce).
- Coordinate with the Hudson Valley Educational Consortium on the AAS - Green Building Maintenance and Management degree.