CAFE NEWSLETTER

Volume 4, Issue 2 | January 2018

In this issue

Dear Faculty,

The CAFE Action Board members welcome you back from what we hope was a restful break. In this issue of the *CAFE Newsletter* we share exciting new curricula as well as curriculum changes for the coming year. Please take a moment to talk with your Department Chair or Representative about the changes in your area! This issue also includes information about upcoming professional development opportunities. The spotlight is shining on the Mathematics department this term. You will be amazed by their dedication to meeting the needs of every level of learner. Have a great semester and please take some time this term to visit the CAFE in G100 for additional resources!

Sincerely,

The CAFE Action Board

Helen Ditouras
Mark Huston
Chris Misiak
Wayne Pricer
Elzbieta Rybicka
Cheryl Snyder
Deborah Taracuk
Tom Worthington
Dianne Aitken
Cindy Cicchelli
Scott Davis
Anne Huber
Leslie Petty
Sandi Tyler

Visit the CAFE in the Grote Bldg., Room 100

Tuesdays, Wednesdays, & Fridays . . . . . 10 AM – 2 PM

Facility is available outside of these hours upon request.

Schoolcraft College

SED Talk Foundation Grant

By Contributing Author Jan Farmer

I hear, I know
I see, I remember
I do, I understand
— Confucius (teacher 500 BCE)

I begin with this often quoted teacher and philosopher to remind everyone how long we have been discussing "best practice" instruction in education. While I think most would agree with Confucius on this notion, most higher education instruction continues to be lecture-based.

SED Talk (Schoolcraft Educational Dialogues) Foundation Grant will support two inextricably linked core missions of education; improve student learning and improve instructor teaching by; (A) partnering to fund a coffeehouse where students, family and community can socialize and listen to Schoolcraft students present their SED Talk performance or presentation and (B) encourage and support monthly faculty meetings focused on "learner-centered instruction" where students produce new knowledge culminating in a SED Talk presentation.

Both of these endeavors are tie-barred for improved teaching and learning for our students. By having our students engage in authentic demonstrations of their learning, Schoolcraft College will increase expectations and challenge while developing pride and achievement for our students and faculty in academic courses.

Begin With the End in Mind

Imagine a regularly scheduled coffeehouse where students give presentations or performances called SED Talks. Like Ted talks, SED Talks will be 8 to 18 minutes in length and will be delivered live or a video of the actual classroom presentation. Our students, their friends and family, community members, area high school teachers and students and others can enjoy a comfortable instructional and entertaining evening. The evening may begin with our culinary department representatives describing what the pastry students were preparing that week and then introduce the two SED Talks for the evening. One can envision such an evening improving relationships on all levels

Now imagine faculty professional development where instructors look forward to participating in their monthly meetings. Such professional learning is embraced because instructors (full-time and adjunct) have a real sense of improved student engagement. The focus of their monthly department meetings would be to identify and implement more "learned-centered" instruction. Such instruction is often assessed through presentations or performances, all candidates for a coffeehouse SED Talk awards.

Instructor-Centered versus Learner-Centered

Needless to say if students are to give presentations of their learning, our instruction must provide similar experiences in the classroom. This type of instruction can best be described as "Learner-centered" as opposed to "Instructor-centered" approach. As a reminder, the table below describes some significant differences between the two.

Board of Trustees
Brian D. Broderick . . . . . Chair
Carol M. Strom . . . . . Vice Chair
Gretchen Alaniz . . . . . Secretary
Eric Stempien . . . . . Treasurer
William P. Erwin, Jr. . . . . Trustee
Joan A. Gebhardt . . . . . Trustee
Terry Gilligan . . . . . Trustee
Conway A. Jeffress, Ph.D., President

As introduced earlier, interested faculty within a department will investigate and implement new instructional strategies that embody a learner-centered approach. These "Learner-Centered Instruction Teams" (LCIT) will meet monthly for one or two hours during which time one or two faculty will present a Learner-Centered strategy they implemented in their class. The LCIT will use a process call "Critical Friends" (or Tuning Protocol). Volunteer faculty will present their "learner centered" instructional activity and provide samples of student work that exemplifies excellent and disappointing results. All LCIT meetings will be facilitate by leaders trained in Critical Friends protocol. Faculty may receive Continuing Education Credit for their participation. Ultimately, it is envisioned that the LCIT team will also select outstanding presentations to represent their content area for an upcoming coffee house SED Talk.

Three Year Plan

Year One (Winter 2018 semester)

- SED Talk (2) for two evenings in Winter 2018
- Selected by participating departments
- First wave of volunteer LCITs
- Facilitated (faculty leaders, Galileo participants, admins)

Year Two

- SED Talks every month (6) at Student Center Coffeehouse
- More Departments participate and more facilitators

Year Three

- SED Talks every week (24) at Student Center or VisTaTech

Value of "Learner-Centered" Instruction to Schoolcraft College, Faculty and Students

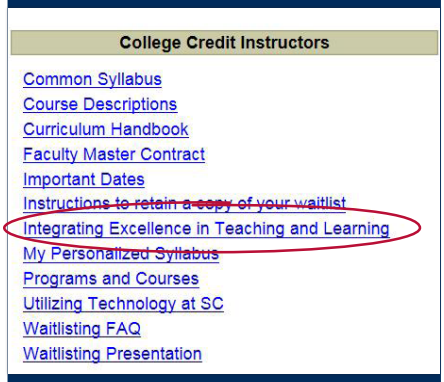
- Improved learning for ALL (students and faculty)
- College-wide implementation improves Schoolcraft College culture and climate
- Faculty and students improve their sense of efficacy
- All have opportunity to improve knowledge, skills, and disposition
- Transformational change if SED Talk and LCITs become sustained and pervasive
- Potential improvement at all levels (Culture, Core Abilities, Guided Pathways, AQIP…)

If you have any questions about the SED Talk Foundation Grant, Learner-Centered Instruction, or the Critical Friends protocol please contact Jan Farmer (jfarmer@schoolcraft.edu) or Melissa Schultz (mschultz@schoolcraft.edu).

Instructor-Centered vs. Learner-Centered Instruction	
Instructor-Centered	Learner-Centered
Low level of student choice	High level of student choice
Students passive	Students active
Power is primarily with the instructor	Power is primarily with the student
Assessment often multiple choice exam	Assessment is often authentic presentation
Student reproduce knowledge	Student produce knowledge

Faculty Handbook

At orientation, all new faculty should have received a copy of *Integrating Excellence in Teaching and Learning*. This handbook is designed to assist faculty with using Schoolcraft College resources and processes. It includes information about assessment, learning plans, rubrics, course formats, instructional operations, technology, and campus navigation.
This document can also be found on WebAdvisor.



Jan Farmer shares information on "How to Improve Student Learning in the Classroom" at the Fall 2015 Welcome Back.

Faculty Professional Development Opportunities

How do I Best Support Student Veterans?

Free on-line Veterans on-Campus Training for Faculty and Staff is now available! Submit your *Certificate of Completion* to Veterans Services no later than April 30, 2018, to be entered into a drawing for Lunch for two at American Harvest — a $50 value! You will also be aiding Schoolcraft College in meeting a goal of 134 trained personnel (of which 77 are already compete!), leading to a $500 award for our Veteran's Center to be used in the support of our military-connected students.

The Council for Michigan Veterans Educators (CMVE) purchased a 2-year agreement with Kognito to license all public colleges and universities for unlimited on-campus use of the Veterans on Campus online training module geared toward faculty and staff. Although this training is not mandatory for Schoolcraft faculty and staff, it is highly recommended as our student veteran population continues to grow.

Learn to support student veterans by building military cultural competency. In this virtual practice environment, you'll engage in simulated conversations with three virtual student veterans, helping each one resolve a challenge they are facing due to their transition. You'll practice managing a challenging class discussion about conflicts overseas, and approaching and referring a veteran who is exhibiting signs of post deployment stress. Developed in collaboration with the Student Veterans of America.

The training is easy and will take only about 20 minutes. To participate:

- Create an account and view the course: www.kognitocampus.com/login
- The enrollment key is "michiganvets"
- Use browsers Google Chrome or Mozilla Firefox. The training will not work with Internet Explorer.
- The browser must be set up to allow pop-ups

If you have any questions, please contact the Veterans Resource Center at 734-462-4352. Thank you in advance for your support!

Teaching Today's Students Part 1

Available on Blackboard now through February 15, 2018

If you were unable to attend this informative session in person in November, it is now available online for CEUs.

"The first in a series of three: A diverse panel of students will participate in a facilitated discussion related to their instructional experience here at Schoolcraft College. Dr. Alec Thomson, facilitator, will use questions developed by Michelle Randall and Wayne Pricer to obtain the students' perspective on the instructional techniques that they felt were beneficial to learning and retaining course material and the assessment methods they felt allowed them to demonstrate their knowledge and understanding over the course content. Information obtained during this session will be used in the next session, Friday February 16."

To access this Professional Development opportunity, you will need to the join the CAFE Blackboard Organization. **You do not need to have gone through Blackboard training to join.** Below are the steps.

1. Go to bb.schoolcraft.edu
2. Click the "Organizations" tab in the upper right
3. In the Organization Search, type in SC.CAFE
4. Click on the name of the organization
5. Once inside, click the **+ Enroll** button on the left hand menu

The session is under "Faculty Professional Development".

Special thanks to Media and Distance Learning for their assistance in videotaping, cutting the video and adding closed captioning.

Teaching Today's Students Part 2

Friday February 16,
10:00–11:30 a.m., LA 200

A panel of Schoolcraft faculty will participate in a facilitated discussion on the information obtained from the November 3rd student panel presentation. Dr. Thomson, with assistance from Michelle Randall and Wayne Pricer, will utilize excerpts from the student panel discussion to analyze and identify teaching strategies and techniques when working with "today's students." Information obtained from this session will be used to guide the last session in this series, Friday March 23.

Teaching Today's Students Part 3

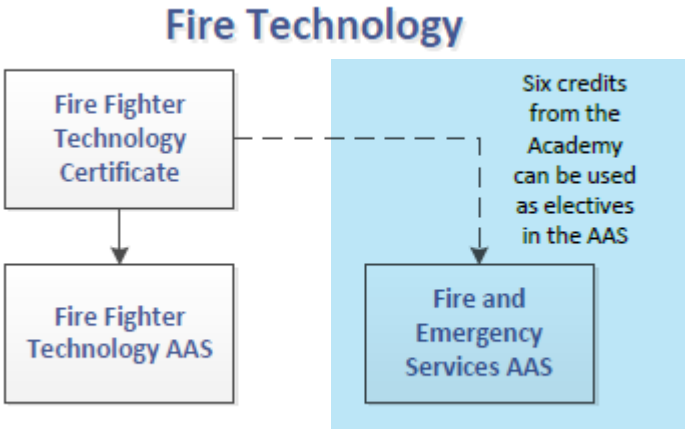
Friday March 23,
10:00–11:30 a.m., LA 200

Dr. Thomson facilitates the sharing of instructional teaching strategies and techniques identified through the discussion on February 16. Potential strategies to be shared may include: methods of teaching students to read textbooks, a variety of assessment techniques and the use of technology within the classroom.

New and Revised Courses and Programs for the 2018-2019 Credential Year

A lot of exciting Curriculum Development has occurred over the past year, bringing new programs, significant program changes, and new courses to the Schoolcraft College portfolio!

Unless otherwise indicated, the following items will be launched (shared with the public) in February so that students are aware of their options for Spring/ Summer/ Fall registration. Some items may require external approvals, such as from the Higher Learning Commission (HLC), so cannot be shared with students or the public at this time. NOTE: only the large changes are shown here; please contact your Department Chair or Representative for information about all changes in your area.

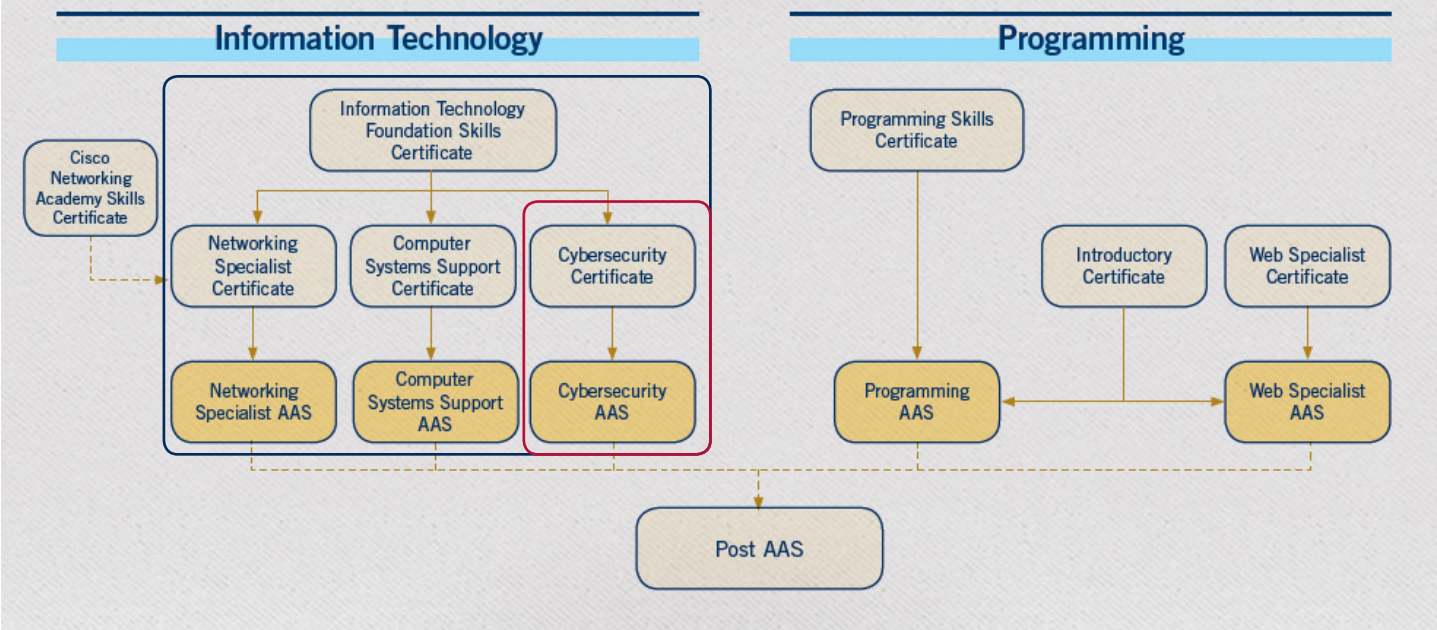


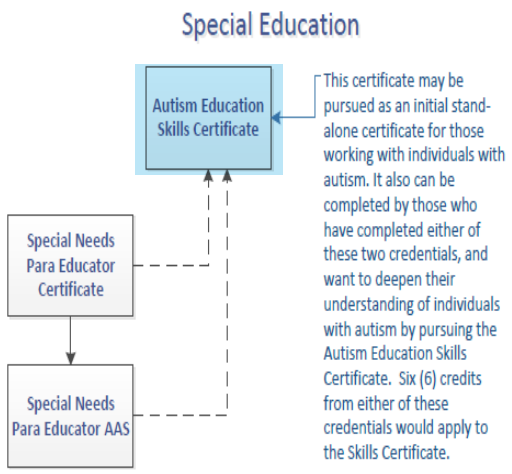
New Programs

Computer Information Systems: The Computer Information Systems faculty have been very busy this year developing new courses and six new programs that are a critical addition to our portfolio. The graphic below shows our offerings as of Spring 2018. Note that the Cybersecurity programs will require additional approvals and we hope to Launch them for the Fall semester. (Figure 1 below)

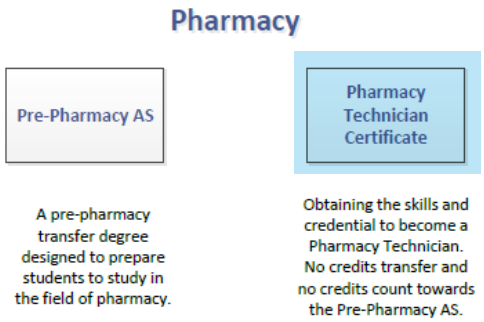
Fire Technology: A new AAS program, Fire and Emergency Services, has been developed. This program will run exclusively online and does not include the Fire Academy. It is designed for firefighters who desire a promotion or individuals who are seeking jobs in the private sector such as industrial complexes, automotive plants, hospitals for emergency management and inspection. Online classes are ideal for firefighters whose schedules do not allow attendance in traditional classrooms.

Figure 1





Special Education: An Autism skills certificate has been developed within our Special Education offerings. It is an exciting opportunity for people already trained in special needs to obtain more knowledge or can be pursued as a stand-alone option. This skills certificate will require Higher Learning Commission approval, so will not Launch in February. Please do not share with students or the public at this time.



Pharmacy: The Pharmacy Technician Certificate will also require HLC approval prior to being shared with students or the public. This certification prepares students to take the Pharmacy Technician Certification Exam which is now required in the State of Michigan for all pharmacy technicians.

Course Revisions

Background Checks: There are several courses within the ECE, SPE, ART, MUSIC, GEOG, MATH, EDUC and PE disciplines in which students are required to pass a background check prior to participating in the course curriculum. Language has been added to these course descriptions to make students aware of this requirement prior to their registration.

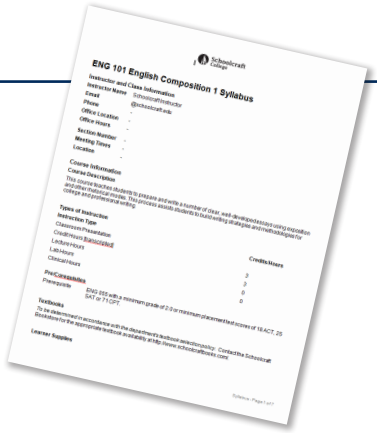
Accuplacer Cut Scores: The Accuplacer exam is an entrance test taken by students who do not have recent ACT/SAT scores. Score results assist the College in proper Reading, Writing and Math placement. This test is being revised by the College Board, a national testing organization, with the new test being available in 2018. You may have noticed "cut scores" on numerous course requisites such as the one shown here for ENG 101. These scores will be updated once the new "crosswalk" between the new test, ACT/SAT scores and our courses has been determined.

Prerequiste	ENG 055 with a minimum grade of 2.0 or minimum score of 18 ACT-English, 25 SAT-Writing and Language or 71 CPT-Sentence Skills.

Requisite Updates: You may have heard that across ALL disciplines Department Chairs and Representatives have been confirming and editing your course prerequisites, co-requisites and recommended requisites. These changes were based upon Curriculum Mapping and revisiting outdated information. The changes will make students more aware of the skills they should possess prior to registering for a course. Please examine the Course Snapshot to see how this has affected the area in which you teach.

Personalizing Your Syllabus

Remember that prior to the start of *each* term you should download your syllabus from WebAdvisor or the M:drive. This assures that your syllabus includes any updates made by the Institution and/or your Department. When personalizing your syllabus remember to follow the guidelines. A short video discussing these and additional instructional design suggestions entitled "Personalizing Your Syllabus" can be found here: U:\CAFE (Center for Academic & Faculty Excellence), or on YouTube at http://tinyurl.com/ycfwlfvy


ENG 101 English Composition 1 Syllabus

Schoolcraft College Curriculum Development for the 2018–2019 Credential Year: Course Snapshot

ACCT	Accounting
AHE	Allied Health Education
ANTH	Anthropology
ARB	Arabic
ART	Art and Design
BIOL	Biology
BMET	Biomedical Engineering Technology
BDT	Brewing and Distillation Technology
BUS	Business
CHEM	Chemistry
CHIN	Chinese
CAB	College and Beyond
COLLS	Collegiate Skills
COMA	Communication Arts
CAD	Computer Aided Design
CGT	Computer Graphics Technology
CIS	Computer Information Systems
CNT	Computer Networking Technology
COMPS	Computer Service
COR	Correctional Science
CJ	Criminal Justice
CUL	Culinary Arts
CBPA	Culinary Baking and Pastry Arts
CM	Culinary Management
DSGN	Design
ECE	Early Childhood Education
ECON	Economics
EDUC	Education
ELECT	Electronic Technology
EMT	Emergency Medical Technology
ENGR	Engineering
ENG	English
ESL	English as a Second Language
ENVR	Environmental Studies
FIN	Financial
FIRE	Fire Technology
FR	French
GEOG	Geography
GEOL	Geology
GER	German
HIT	Health Information Technology
HIST	History
HS	Homeland Security
HDS	Human Development Services
HUM	Humanities
ITAL	Italian
LR	Learning Resources
MFG	Manufacturing
MAS	Massage Therapy
MATH	Mathematics
MA	Medical Assisting
MT	Medical Transcription
MET	Metallurgy and Materials Science
MUSIC	Music
NURS	Nursing
NATP	Nursing Assistant Training Program
NFS	Nutrition and Food Science
OSH	Occupational Safety and Health
OIS	Office Information Systems
PHARM	Pharmacy
PHT	Pharmacy Technician
PHIL	Philosophy
PE	Physical Education
PHYS	Physics
PLAST	Plastic Technology
POLS	Political Science
PSYCH	Psychology
QM	Quality Management
SOC	Sociology
SRT	Sound Recording Technology
SPAN	Spanish
SPE	Special Education
THEA	Theatre
WELD	Welding Technology

KEY:

Green: New Course in this area (may have revised and/or inactivated courses as well)

Purple: Revised Course in this area – student impact

Orange: Revised Course in this area – formatting only

Blue: All Courses Scheduled for Inactivation

Department Spotlight: Mathematics

Mathematics is the language with which God wrote the universe. – Galileo Galilei

Students often question the need for math in their curriculum, and it is true that they may never need to solve an equation, graph a line, or determine when two trains will meet. However, the study of mathematics develops logical thinking, organized and systematic approaches to problem solving, and plain old perseverance. Logic, organization, and perseverance are the skills that will always be in demand in the workplace. A solid background in mathematics leads to a broad spectrum of careers in engineering, finance, and science, to name a few. A student will never hear from a future employer that they have too much math in their credentials.

Mathematics Faculty

At Schoolcraft College we currently have 10 full time and over 50 part time mathematics faculty members. Some of them have chosen to share a little more about themselves below.

∠ Larry Choraszewski

Larry is a Schoolcraft College graduate and former Pythagorean Prize recipient. He has an Associate's of Science from Schoolcraft, along with a Bachelor's and Master's of Arts in Mathematics from Wayne State University. His early teaching experience came from when he was a math tutor at Schoolcraft's Learning Assistance Center, while also participating in the Peer Assisted Learner (PAL) program. He later moved on to teach mathematics at a high school in Southwest Detroit, while also teaching classes part-time at Schoolcraft. In 2013 he was brought on as a full-time mathematics instructor at Schoolcraft and is now also serving as the new Chair of the Pythagorean Prize Committee. When he's not teaching, he enjoys spending time with his wife and three children at his home in Farmington.

∠ Tariq Hashim

Tariq is an instructor in Mathematics and Engineering and a former U.S. Air Force Officer. He possesses a Bachelor's and Master's degree in Aerospace Engineering from M.I.T. and a Master's degree in Mathematics from the U.S. Air Force Institute of Technology. He has over 12 years of teaching experience. Tariq is currently an engineer at General Motors where he has published several patents in automotive engineering.

∠ Kathy Jankoviak Anderson

Kathy has been teaching at Schoolcraft since 2001. She has a Bachelor's of Science in Mathematics/Secondary Education from Northern Michigan University. She began her teaching career in 1985 and taught 3 years at the secondary level before moving on to the community college level. She was a part-timer for 7 years at Lansing Community College: tutoring, teaching, and working as an assistant course coordinator in the Math Lab. While at LCC, she completed a Master's of Science in Applied Mathematics at Michigan State University. In 1993, she got a full-time position teaching at Mid-Michigan Community College in her hometown of Harrison, and taught there for 8 years before coming to Schoolcraft. With apologies to *Star Trek*, she has tried to "boldly go where no other full-time instructor has gone before" to develop and/or improve curricula for classes like MATH 045, 101, and 111, which at one time received very little full-time attention. She is currently teaching a hybrid MATH 101 course, which is being offered for the first time at Schoolcraft this fall.

∠ Denis Johnson

Denis received his Bachelor's of Science in Mathematics from the University of Detroit-Mercy. He majored and minored in Mathematics and received the 2006-2007 Math and Computer Science "Student of the Year" award. He wrote his senior research paper on the application of calculus to business profit data to predict profit margins in future fiscal years. He received his Master's of Science in Applied and Computational Mathematics from University of Michigan-Dearborn where his thesis was on the application of Wavelet Functions and Fourier Series to remove excess noise from Magnetic Resonance Images (MRI's).

∠ Andrea Lazarski

Andrea has been teaching at Schoolcraft College for 11 years and has taught math for over 20 years. She has a Bachelor's of Science degree in Mathematics from The University of Michigan-Dearborn and a Master's degree in Mathematics from Wayne State University. She began her career teaching at the high school level and was the lead mathematics instructor for the development of the Dearborn Center for Math Science and Technology. When she came to Schoolcraft College, she taught math courses for elementary teachers and a variety of other courses. Most recently she has developed an online Intermediate Algebra course for Distance Learning and continues to learn new skills in line with technology and educational advancements.

∠ Alexander Maddox

Alexander is an adjunct instructor of mathematics. He received his Bachelor's of Arts from the University of Michigan-Flint in 2012, and earned his Master's of Arts at the same school in 2014. He has been teaching at Schoolcraft College for two years now, and he enjoys his job. Alex's career goal has always been to become a math instructor at the college level, but he also has an interest in the medical field and may consider a job as a phlebotomist or medical assistant. In his spare time, he likes to photograph, shop at the mall, go to the park and the zoo, and get a good workout at his local gym.

∠ Mike McCoy

Originally from Kalamazoo, MI, Mike received a Bachelor's in math from Western Michigan University and a Master's in math from the University of Nebraska-Lincoln. He has been on the faculty at Schoolcraft since 2009, teaching a wide range of classes from pre-algebra to differential equations. Prof. McCoy also serves as the faculty advisor to the Math & Physics Club.

∠ Audrey Mingela

Audrey started as an adjunct faculty in 1994 at Schoolcraft, and worked 'the circuit' which also included Henry Ford Community College, and Oakland Community College. In 1998, she left teaching, and accepted a full-time position at Compuware Corporation. Yearning to return to the classroom, combined with a stroke of good luck, a full-time position became available at Schoolcraft. Audrey returned to Schoolcraft as a full-time instructor in 2000. She assumed responsibility for the Math CBI (computer based instruction) courses held in a computer lab classroom specifically designed for Math and English developmental courses. This modality was phased out, and soon after, online courses were on the horizon. Audrey developed and taught the first online math courses offered at Schoolcraft, and spearheaded a project in which the math department collaborated to create an additional online course, while earning online credentials. Audrey has served, and continues to serve, on a variety of committees over the years, including student code of conduct, faculty evaluations, hiring, and a number of math department committees. Audrey is the current Department Chair, and teaches a range of courses from Beginning Algebra to Calculus III. She earned her Bachelor's of Science in Mathematics at the University of Michigan – Dearborn, and Master's in Mathematics at Eastern Michigan University.

∠ Paula Schmansky

Paula holds a Bachelor's of Science degree in Mathematics from Notre Dame College in Ohio, and a Master's

From left to right: Paula Schmansky, Brad Stetson, Denis Johnson, Kathy Jankoviak-Anderson, Audrey Mingela, Andrea Lazarski, Larry Choraszewski, Mike McCoy, Randy Schwartz

of Arts degree in Secondary School Teaching from Eastern Michigan University. She is currently a full-time instructor in Developmental Mathematics. Previously she was an adjunct instructor at Henry Ford Community College, has many years of experience in the classroom and 12 years in the actuarial field. She was privileged to have been asked to become a member of the "Achieving the Dream" team at Henry Ford College. In this capacity she had the chance to work with several of the full-time mathematics instructors developing the MPASS (math practice and supplemental sessions) component of the Beginning Algebra classes. This is similar to the PAL program here at Schoolcraft. Paula has attended both the MichMATYC and AMATYC conferences as well as having participated in many professional development webinars and classes. She has also been a member of the National Council of Teachers of Mathematics (NCTM) for many years. She wants the students to be successful in their math classes, to know they can understand math, whether they only need to take one, or find themselves going on to higher levels. In her spare time, she likes to read, travel, and spend as much time as possible with her family and friends.

∠ Randy Schwartz

Randy teaches intermediate and upper-level courses, and likes to bring bits of the global history of mathematics into his instruction. He has degrees in mathematics from Dartmouth College and the University of Michigan, and has taught full-time at Schoolcraft since 1984. Schwartz enjoys arranging guest speakers hosted by the Math and Physics Club, and has been Editor of *The Right Angle*, the monthly Mathematics Dept. newsletter, since 1994. He also makes professional contributions: he speaks and writes about medieval Arab mathematics; serves on the Commission on the History of Science and Technology in Islamic Societies (CHSTIS); and is an Associate Editor for *Convergence*, the Mathematical Association of America's online journal about the intersection of math, history, and teaching.

∠ Brad Stetson

Brad is the math department technology representative. He began teaching online classes in 2002. He is the instructor for the courses necessary for credentialing to teach and/or develop online classes (Distance Learning and Teaching, as well as Online Course Design and Development). He primarily teaching Intermediate Algebra in the classroom and Elementary Statistics online, but has been known to teach Math 047, 111, 119, and others from time to time. Brad earned his Bachelor's degree from the University of Michigan and his Master's from the University of Florida.

Mathematics Activities at Schoolcraft College

The math department faculty lead numerous activities for both students and the general public here at Schoolcraft College. Here is a little more information about these events that you may see cross your inbox throughout the term.

∠ Math and Physics Club

The club was founded in March 2008 by Schoolcraft grad, Alex Simpson, as an open forum for students to meet and discuss math and physics studies. Since then, the Math and Physics Club has evolved to a weekly gathering facilitated by Professors Mike McCoy and Randy Schwartz. Students are challenged with further explorations in math and physics, as well as, have the chance to forge new friendships and connections with others. Each fall and winter semester, the club invites a guest speaker, usually from industry or from a local university, to come to campus and present an interesting topic that is related to their field of work. Funding is provided by the Schoolcraft Foundation via Mike McCoy's "Promoting STEM Excellence" grant.

∠ AMATYC Competition

Twice a year, the American Mathematical Association of Two Year Colleges (AMATYC) provides college students the opportunity to compete nationally on a test that includes topics in mathematics up to and including the statistics and precalculus levels. The test is administered at Schoolcraft College for our students, and proctored by Mike McCoy, with help from several members in the department. The test is quite challenging, and draws a crowd of upwards of 100 or more Schoolcraft students each semester. Schoolcraft students have placed first in the Midwest region, and as high as third place nationally! The "Promoting STEM Excellence" grant provides prize money for the three students who achieve the highest scores.

∠ Pythagorean Prize

The Pythagorean Prize is the math department's annual scholarship ceremony in which excellence in mathematics is celebrated. Established in 1995 by retiree Larry Williams, the Pythagorean prize started with recognizing two outstanding students. The first awards were presented in 1996. The ceremony included homemade treats brought in by faculty, and no prize money for students. Over time, the ceremony and prize money have grown. The first place prize is $3000! Prize money for second and third place is also given, as well as, goody bags for all winners and runner ups. The Pythagorean Prize committee was chaired by Professor Sandy Kerr

from 2006-2017, with Professor Larry Choraszewski assuming the role as chair this fall.

∠ *The Right Angle*

Started in Fall 1992, as a department newsletter by then department chair Ed Kavanaugh, The Right Angle has evolved into a journal that is enjoyed nationally by former students, and educators at community colleges and universities. Professor Randy Schwartz is the current editor of this publication gem. While preserving the Schoolcraft specific department activity and news, The Right Angle is chock-full of interesting articles revolving around mathematics, many written by math faculty and students, as well as, series of challenge questions posed to the reader.

Student Placement in Mathematics

It is estimated that fifty percent of Americans struggle with math anxiety. Math anxiety is defined by Mark Ashcraft as "a feeling of tension, apprehension, or fear that interferes with math performance"(2002), and in 1972 Richardson and Suinn (1972) developed a math anxiety measurement scale. Fortunately for Schoolcraft College students, we have numerous resources in place to alleviate this anxiety. These include: fantastic faculty, proper placement through identification of prerequisite skills, and supplemental support!

Schoolcraft College offers a wide variety of mathematics courses to meet each student at their level. All associates degree seeking students are required to take at least one mathematics course. The mathematics courses range from developmental through transferable higher level math. Often high school students utilize the duel enrollment option to take high level mathematics courses not offered at their institution.

All students who have a desire to graduate with an AAS are required by Schoolcraft College to complete at least 3 credits in mathematics. In each subject area, students will benefit from a unique set of mathematics skills. To this end, the mathematics faculty recently worked with the Manufacturing Technology faculty to develop MATH 102 Technical Mathematics. "Technical Mathematics provides the practical mathematics skills needed in a wide variety of occupational programs. Students in this course will address topics including measurement, basic algebra, geometry, right triangle trigonometry, graphing and statistics."

Starting with a strong mathematics foundation is critical for success in future coursework and many career choices. During registration at Schoolcraft College, students are required to either submit their SAT/ACT scores from the past three years or take the Accuplacer College Placement Test (CPT) in the testing center. (NOTE: the Accuplacer exams are currently being rewritten at the National level). These tests help to determine the baseline skills the student has, and determine which mathematics class they should take first. They can test in Arithmetic, Elementary Algebra or College Level Math.

If we look at the prerequisite skills for MATH 126 (Figure 1 below), College Algebra, we see that stu-

Figure 1

Mathematics - MATH 126

College Algebra (4-0) 4 Cr. Hrs.

SAMPLE
Lecture Hours/Week
Lab Hours/Week
Credit
(2/4) 4 Cr. Hrs. ← *Hours*

Course Description

The function concept, polynomial, rational, exponential and logarithmic functions, curve sketching, systems of linear equations and inequalities, graphical solutions and business applications are the topics included in this course.

Prerequisites

(A requirement that must be completed before taking this course.)

- MATH 113 with a minimum grade of 2.0 or minimum placement test score of 23 ACT, 29 SAT or 63 CPT (College-Level Math).

Figure 2

Schoolcraft College

Math Course Placement Recommendations Using ACT, Revised SAT, or CPT (Accuplacer) Scores*

Math Course Placement	Pre-requisites	ACT Math Score	Revised SAT Math Score	CPT Arithmetic Score
Colleague Label		ACT.MATH	RSATMTEST	CPT.AR
Score Range		(1-36)	(10-40)	(1-120)
Non-credit/CE classes only		1 - 10	10-14	1 - 22
Math 045	ACT min 11, RSAT min 15, CPT min 23	11 - 15	15-21	23 - 59
Math 047	MATH 45 grade 2.0	16 - 18	22-24	60 - 74
Math 101 College level reading recommended	MATH 45 grade 2.0, ACT min 16, RSAT min 22, CPT min 60	16 - 18	22-24	60 - 120
ACCT 201 Colls 053+ reading level recommended	None	16 - 18	22-24	75 - 120
Math 053*, Math 102*, or Math 111*	MATH 47 grade 2.0	16 - 18	22-24	75 - 120
Decision Zone *Discuss options for Fast Track and courses*		*(18)*	*(24)*	*(116-120)*
Math 105*	MATH 53 grade 2.5 or ACT min 19, RSAT min 25, CPT Elem Alg min 100	19 - 22	25-28	CPT Elem. Alg. 100
Math 113*	MATH 53 grade 2, or ACT min 19, RSAT min 25, CPT Elem Alg min 78	19 - 22	25-28	CPT Elem. Alg. 78
Math 119 or higher*	MATH 55 and MATH 113 min grade 2.0, or ACT min 23, RSAT min29	23 - 36	29-40	See CPT College Level Math

Algebra and Higher Math Placement		Algebra and Higher Level Math Test Scores			
		ACT Math Score	Revised SAT Math Score	CPT Elem. Algebra	CPT College Level Math
Colleague Label		ACT.MATH	RSATMTEST	CPT.EA	CPT.CLM
Score Range		(1-36)	(10-40)	(1-120)	(1-120)
Math 047	MATH 45 grade 2.0	16 - 18	22-24	1 - 27	---
Math 053	MATH 47 grade 2.0	16 - 18	22-24	28 - 77	---
Decision Zone *Discuss options for Fast Track and courses*		*(18)*	*(24)*	*(73-77)*	---
Math 105 College level reading recommended	MATH 53 grade 2.5 or ACT min 19, RSAT min 25, CPT Elem Alg min 100	19 - 22	25-28	100 - 120	---
Math 113	MATH 53 grade 2, or ACT min 19, RSAT min 25, CPT Elem Alg min 78	19 - 22	25-28	78 - 120	1 - 62
Math 119*, Math 122*, Math 126*, Math 129* or Math 135*	MATH 55 and MATH 113 min grade 2.0, or ACT min 23, RSAT min 29, CPT College Level Math min 63	23 - 36	29-40	See CPT College Level Math	63 - 102
Math 135*, Math 145*, or Math 150*	MATH 126 grade 2.0 or ACT min 23, RSAT min 29, CPT College Level min 103	23 - 36	29-40	See CPT College Level Math	103 - 120

* When more than one class is recommended, discuss options. The class recommended will depend on the program selected.

Reformatted, Revised, and Reviewed 06-10-2016
M:\Curriculum Development\Placement Score Recommendations
M:\Group Share\WEBDEV\CUT SCORES PLACEMENT CHART\Current

dents should have scored at least a 23 ACT, 29 SAT or 63 CPT (College Placement Test, Math section) to take the course.

This information is compiled into documents called Placement Charts, such as the one shown in Figure 2. The charts aid counseling and advising on the proper placement of students. We can see that the cut scores on this chart match the information in the requisite language above.

In some cases it is recommended that the student begin in MATH 045, 047 and/or 053. As these courses are considered to be below college level, the student may not use these credits towards graduation. In order to build a strong foundation, these courses can be a critical part of relieving math anxiety; however do extend the time the students spend in college. To attempt to aid these students, there are several resources discussed in the next section that are offered by the college to minimize the number of students who need to take these courses.

∠ Supplemental Support

Schoolcraft College offers several mathematics support options prior to students even setting foot in their classrooms.

Placement tests:

Before taking the placement test, links to several online preparation resources are available on the Schoolcraft College website: www.schoolcraft.edu/testingcenter/placement-testing and www.schoolcraft.edu/lac/success-seminars-and-workshops/make-it-count. There is also a JumpStart Workshop (discussed below) geared towards this end.

JumpStart! Workshops

JumpStart! Workshops are a two-part series of workshops that are offered prior to the start of the term, in both face-to-face and Webinar formats, with course packs available. They are designed for students to review course-specific math topics and study skills, to assure that the student will be successful right out-of-the-gate. These workshops not only prepare students for

mathematics courses, but also for non-mathematics liberal arts and applied science courses that utilize mathematics skills. In addition to Mathematics, these content areas currently include Chemistry, Physics, Economics, Electronics, Biomedical Engineering Technology, and Accounting.

In Part 1, all participants attend "Math Survival Skills" where students take part in a math study skills inventory and learn specialized classroom, homework and test taking skills. From there, there are five different levels of Part 2 Workshops that are aligned to the specific skills needed for the associated courses. For example, students planning to take CHEM 104 would take JumpStart! 4000. This course focuses on reviewing expressions, linear equation solving, exponent rules, graphing lines and factoring polynomials.

All of these workshops are free to students! Prior to the start of each term emails go out to any student registered for these courses, sharing information about the Jumpstart workshops and their availability for the term. Take a moment to review each workshop description to determine if students in the course you teach would benefit from a review of these skills. www.schoolcraft.edu/lac/success-seminars-and-workshops/jumpstart

If your department knows of a class that they would like to have added to the list please contact Terri Lamb at tlamb@schoolcraft.edu.

FastTrack:

The FastTrack program is designed for students whose scores fall into the "decision zone" on the placement chart. These courses are also offered for free prior to the start of the term. They are designed to allow students the opportunity to raise their scores enough to move to the next level of courses, bypassing the prerequisite.

In addition to support prior to the start of classes, the mathematics students are offered numerous opportunities to obtain aid during their courses. Faculty office hours are an obvious choice along with free math tutoring offered through the Learning Assistance Center. In addition, there is an Academic Success Coach for mathematics and Exam-A-Rama sessions to prepare for final exams.

Many of these courses are taught by our very own Super Hero, Math Mom. She is elusive, but you may catch a glimpse of her crossing campus displaying a square root symbol and her cape.

References

Ashcraft, M.H. (2002), "Math anxiety: Personal, educational, and cognitive consequences", Current Directions in Psychological Science, 11: 181–185, doi:10.1111/1467-8721.00196

Richardson, F. C., & Suinn, R. M. (1972). The Mathematics Anxiety Rating Scale: Psychometric data. Journal of Counseling Psychology, 19, 551-554