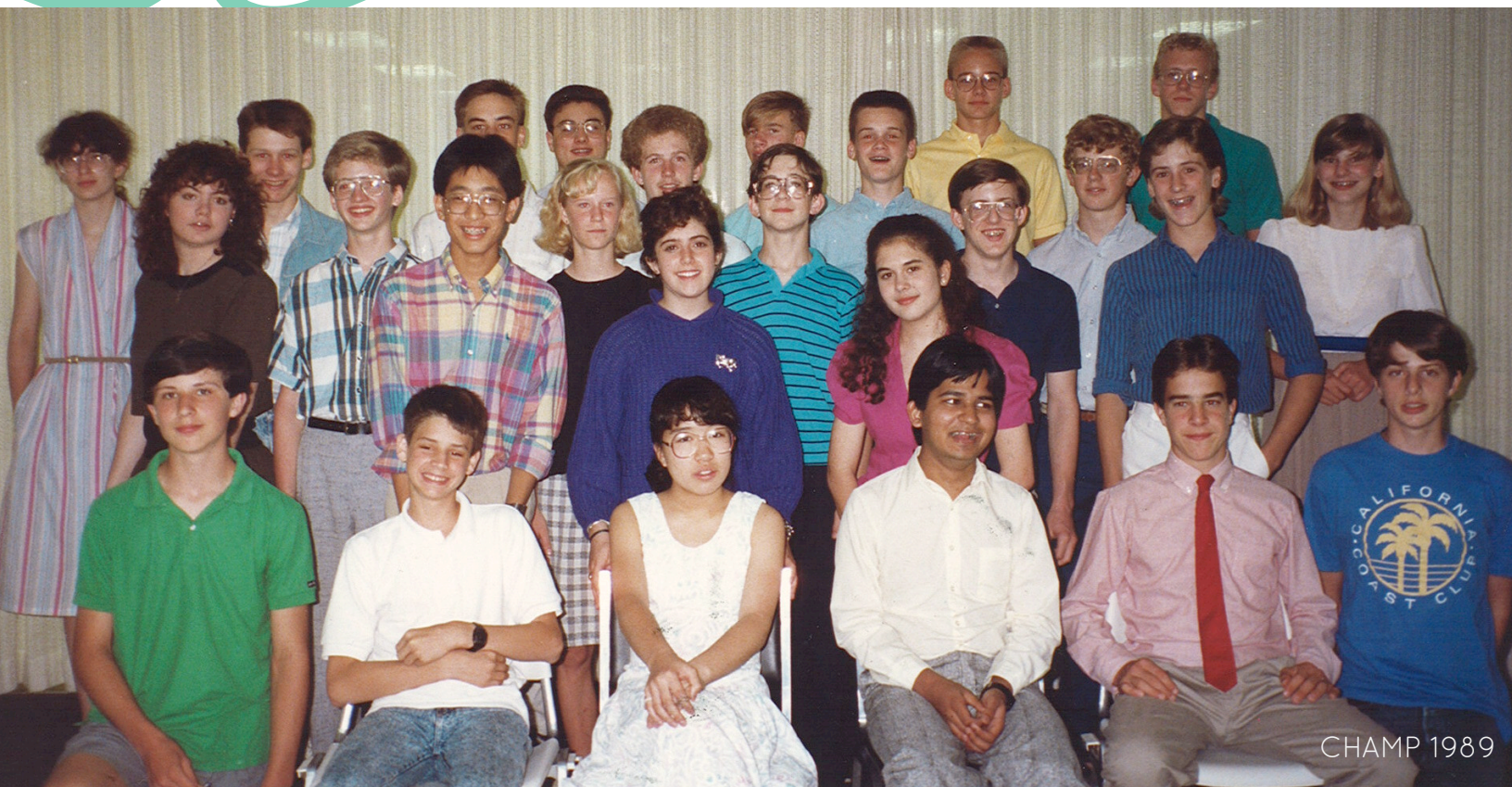
25

Office of Gifted and Talented Education

2012-2013

Twenty-Fifth Anniversary



FROM, the DIRECTOR

KATHEE MCDONALD, 2011

Dear Students and Parents,

Welcome to the 2012-2013 GATE Program Guide. This comprehensive overview will allow students and their parents to see all we offer for students in grade 7 continuing through high school. Each program requires students to meet academic criteria and one program even allows students in high school to begin earning MSU credits. Overall this program guide will allow students and parents to begin planning for this year—and the future!

Did you know that while you have always had computers in your life, it was in 1986 when people started to use their first laptop computer, the IBM PC Convertible, which led to spread of the first PC virus Brain. Nintendo introduced their first games in the US, gasoline was 89 cents a gallon, a loaf of bread cost 56 cents, and "Top Gun" was playing at your local theater. Beginning fall 2011, we are observing our 25th Anniversary. The GATE Office began offering the CHAMP program in fall 1986, followed by High Achievers in summer 1987. We now offer ten programs for students. Over our twenty-five years GATE has provided opportunities for students to challenge themselves. Recently we sought out some of our past students to learn how they attributed their current achievements to their GATE experiences. At http://gifted.msu.edu/node/309, you can read some of these GATE Sagas. Who knows what you will accomplish in the next twenty-five years? Perhaps GATE programs and experiences could enhance your future.

So ask yourself "Why be ordinary?" Many times I'm quizzed about what colleges and universities look for when students apply to higher education institutions. After talking with many admissions officers, I have concluded that they are looking for students who challenge themselves; students who go beyond the norm, pushing themselves academically and beyond their comfort zones. When you look through our guide you'll see that we offer programs that do exactly that. You may be traveling to a foreign country, you may be residing on campus working with MSU professors in their classrooms and labs, or you may be examining blood splatter or collecting evidence from a crime scene, then working in a lab to identify evidence so it can be used to solve the crime and identify the suspect. In all GATE programs you'll be working with students with like abilities and interests, something you may never have done before in your home school.

We strive to provide the best instructors that MSU has to offer. As you browse through our programs, note the instructors' credentials. Many have numerous patents, been recognized for excellence in teaching, as well as continuing research within their fields. All these factors contribute to a learning environment that students don't experience until entering college as an undergraduate.

I look forward to seeing you in one of our summer or academic year programs. Please feel free to contact our office if you have questions about any of the GATE programs. Why be ordinary? Join other students just like you at MSU this year, pushing themselves beyond, learning that they are extraordinary!

Sincerely,

Kathee McDonald

Kathee McDonald, Director
Office of Gifted and Talented Education
Michigan State University

TABLE of CONTENTS

Overview of GATE Programs 3

NUAMTS Testing 4

School-Year Programs 6
- CHAMP 8
- MCHAMP 10
- NEWCHAMP 12
- ISHALL 18
- LEAF 22

Summer Programs at MSU 26
- CSI: Youth Forensic Science Program 28
- High Achievers 33
- MST: Math Science Technology @ MSU 37
- Ingham ISD Programs 45

Summer Travel Programs 46
- Shiga Student Exchange 48
- China Adventure 50

Important Dates 53

** Visit our website at **www.gifted.msu.edu** to print out an application for our programs.

Spartan Youth Programs

MICHIGAN STATE UNIVERSITY

Programs and Activities for Pre-K through 12th Graders

What is SYP?

A website that displays a wide range of exciting opportunities for pre-K through 12th graders to improve their knowledge and skills in specific subject areas.

Pre-college programs are an excellent way for students to explore majors or careers while being introduced to the college environment.

With **over 200 listings** covering topics in agriculture, art, business, computers, engineering, math, music, science, sports, and writing, MSU is sure to have a program for every student!

You can search the SYP website for:

- summer and school year programs
- opportunities to earn college credit
- residential experiences on the MSU campus
- financial assistance
- study abroad possibilities

spartanyouth.msu.edu

GATE Programs are...

EDUCATIONAL

EXCITING

We take special pride in making sure that all of our programs are not only educational, but that they will stimulate intelligent minds in new and different ways. We've always believed that the best learning takes place when students are encouraged to challenge conventional ideas, have new experiences, and interact with others in ways they've never imagined. You can jet across the planet to immerse yourself in another culture with a new group of friends, use MSU's incredible research technologies to see beyond the limitations of conventional microscopes, or create your own quality film to make a statement. You choose your individual learning adventure!

GATE programs are specifically designed to challenge bright students who excel in all academic areas. Students can expand their creativity in the arts and humanities, learn about unfamiliar cultures and languages, or build on their math and science knowledge base in cutting edge fields of technology and research. Our classes are taught by MSU faculty and other experts in their field who write their own curriculum to test motivated, intelligent middle school and high school students. Whether you are looking for a program to supplement your school's math, language or literature curriculum or just for a fun summer experience, these opportunities will enhance your education in *new* ways.

UNIQUE

MSU is one of the nation's top research universities, with an incredible array of resources available to its students. As a participant in GATE programs, you are given access to all that this wonderful university has to offer. From an astonishingly large library boasting over 4 million sources in the main building to the National Superconducting Cyclotron Laboratory here on campus, MSU is truly a unique learning environment with an immense wealth of resources. Our programs will allow you to take advantage of this richness with experiences you will not find anywhere else.

No one wants to attend an extra academic program that's all work and no play. That's why we strive to make our camps and courses the most fun you've had in a long time! Our staff and faculty are all goofy, fun-loving individuals who will help you enjoy your classes as much as your free time on campus – which is also loaded with unique activities for you to enjoy with friends! Visit MSU's pool, bowling alley, and planetarium, or visit the MSU dairy store and walk along the animated Grand River shopping strip, or you can simply watch a movie with new friends. If you are on campus or winging your way to another continent, in camp or just in classes, this experience will be some of the most fun you've ever had. Because the real excitement isn't about what you do with your time – it's about the people you will meet along the way: new friends who are as intelligent, curious, and fun-loving as you are.

FUN

Center for Talent DEVELOPMENT®

SCHOOL OF EDUCATION & SOCIAL POLICY

Northwestern University's Midwest Academic Talent Search

Registration for NUMATS 2011-2012 will begin September 1.

Students in grades 3 through 6 may take the **EXPLORE** test.

Students in grades 6 through 9 may take the **ACT** and/or **SAT**.

REGISTER ONLINE AT
ctd.northwestern.edu/numats

NORTHWESTERN UNIVERSITY

Center for Talent Development

phone: 847/491-3782 extension 3

e–mail: numats@northwestern.edu

web: ctd.northwestern.edu/numats

What Is NUMATS?

Started in 1982, **Northwestern University's Midwest Academic Talent Search (NUMATS)** is a program of the Center for Talent Development (CTD) that establishes a community of gifted learners and offers them above-grade-level testing, academic planning, and a wealth of resources. This Talent Search approach is a well-researched and respected program model in gifted education.

NUMATS uses the EXPLORE test, developed by ACT and normally given to students in grade 8, to determine the abilities of gifted students in grades 3 through 6. The ACT and the SAT tests, typically used for college admissions, provide a more accurate picture of the mathematical and verbal reasoning abilities of gifted students in grades 6 through 9 than grade-level tests. This above-grade-level testing opens doors to an abundance of opportunities that are unavailable to students with only grade-level test scores.

After students test, parents and teachers receive comprehensive information about how their student measures up to other gifted students and **Course Recommendations based on test scores** in the different subject areas. This valuable feedback helps families plan for the future. More than 25,000 families each year turn to NUMATS for this kind of insight.

NUMATS testing provides a more accurate assessment of gifted students' abilities than grade-level testing.

Our NEW online Toolbox provides a dynamic password-protected online network to meet the changing needs of students. Educators and families can access student test scores, percentiles compared with other same-grade test-takers, recommended course sequences and program options, and an ever-expanding variety of resources including articles on teaching and parenting gifted students written by leaders in the field and, coming soon, a virtual lecture series and array of content developed for and by gifted students.

Testing for GATE Programs

Each GATE program requires an ACT, SAT or another test score in order to evaluate the eligibitlity of the applicant. No applications can be processed without one of these standardized test score.

For students in grades 6-9, NUMATS offers testing dates throughout the school year. Students can visit Northwestern University's Center for Talent Development website in order to find more information on test dates and registration.

REQUIREMENTS BY PROGRAM

CHAMP/MCHAMP/NEWCHAMP

ACT Math: 21 and ACT Composite: 23
SAT Math: 530 and SAT Total: 1010

ISHALL

ACT English: 21 and ACT Critical Reading: 22
SAT Critical Reading: 520

LEAF

ACT English: 21 and ACT Critical Reading: 22
SAT Critical Reading: 520

CSI FORENSIC PROGRAM

Strong standardized test scores from:
SAT/ACT
or MEAP (Tier I in science)

HIGH ACHIEVERS

ACT: English 22 and Composite 21
SAT: Critical Reading 530 and Total 1040
PLAN: English 22 and Composite 21
PSAT: Critical Reading or Writing 53 and Total: 104

MST@MSU

ACT: Math 21 or Composite 23
SAT: Math or Critical Reading 530 or Total 1010

SHIGA

No standardized scores needed

CHINA ADVENTURE

Strong standardized test scores from:
ACT/SAT
PLAN/PSAT

ACT/SAT TESTING PROVIDERS

NUMATS: Northwestern University Center for Talent Development
ctd.northwestern.edu/numats **preferred test dates for young students

**ACT dates: December 10 & February 11

**SAT dates: November 5, December 3 & January 28

after January 28: Collegeboard: collegeboard.org
ACT: act.org

late testing options: MSU Testing Center (by appointment only)
contact the office at (517) 432-2129

School Year Programs

CHAMP 1990

"I honestly didn't think of myself as 'Gifted.' CHAMP and High Achievers showed me that I could excel in anything I put my mind to, from tough academic work to speaking in front of hundreds of people. GATE's programs granted me an opportunity to study with groups of students that loved to learn just for the sake of it, just as I did."

Our school year programs are courses for academically talented middle and high school students who wish to challenge themselves in the areas of math, literature and language. These programs are designed to replace high school curriculum, allowing students to complete four years of the state of Michigan's aligned high school math, literature or foreign language curriculum as well as meeting national standards in just two years of study. Courses meet once a week on and off MSU's campus and are taught by well respected faculty. Once students complete the program, they are prepared to take AP courses at their high school or dual enrollment courses through MSU.

Accelerated Mathematics

CHAMP

Grades: 7-10
2012-2013 Program Dates
Fall: August 30 - December 13
Spring: January 10 - April 25

MCHAMP

Grades: 7-10
2012-2013 Program Dates
Fall: September 4 - December 11
Spring: January 8 - April 23

NEWCHAMP

Grades: 7-10
2012-2013 Program Dates
Fall: September 5 - December 12
Spring: January 9 - April 24

Accelerated Literature & Language

ISHALL

Grades: 7-10
2012-2013 Program Dates
Fall: September 5 - December 12
Spring: January 9 - April 24

LEAF

Grades: 7-10
2012-2013 Program Dates
Fall: August 30 - December 13
Spring: January 10 - April 25

CHAMP

August 30 - April 25

CHAMP, a consortium of the Clinton, Eaton, Ingham and Shiawassee Intermediate School Districts in partnership with the Department of Mathematics and the Honors College of Michigan State University, provides classroom instruction for qualified mathematically gifted students in grades 7-10.

CHAMP is designed so that the participating students will learn in two years the content assigned in High School Curricular Expectations (HSCE) aligned four-year high school mathematics curriculum and national core curriculum standards. In their first year of CHAMP, students study Algebra I and Algebra II. In the second year, CHAMP students study Geometry and a standard pre-calculus course (Trigonometry, Analytic Geometry, College Algebra, and a brief introduction to calculus concepts). Normally, students will begin CHAMP with the study of Algebra I. Initial placement that bypasses one or more CHAMP courses may be allowed only in very unusual circumstances.

ELIGIBILITY

Students wishing to enroll in the CHAMP program must meet the following minimum requirements:

ACT Math: 21	and	ACT Composite: 23
SAT Math: 530	and	SAT Total: 1010

Students must submit a recommendation from their current mathematics teacher.

INFO MEETING DATES

Information Meeting
Thursday, March 15, 2012 | 6-7 pm | B108 Bessey Hall
First Day of Class
Thursday, August 30, 2012 | 1-3:30 pm | Wells Hall

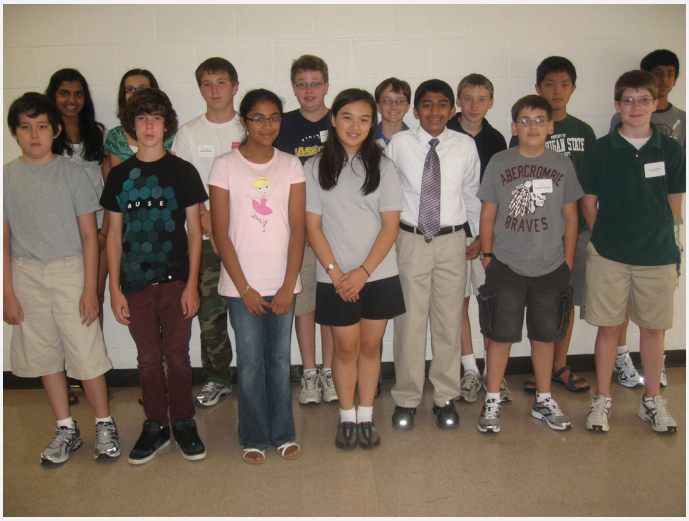
COSTS

The cost of CHAMP instruction per student per year is approximately $1000 or $500 per semester. Upon acceptance into CHAMP each student pays an initial, non-refundable $40 reservation fee confirming his/her intent to participate. Returning Year II students must pay a non-refundable $40 continuation fee confirming his/her intent to participate. The parents and/or the local school district pay tuition in the amount of $200 per student in bimonthly payments. Tuition will be divided into five payments. Payments will be due August 15, October 1, December 1, February 1 and April 1. Transportation will be provided by the parents. Classrooms, textbooks, and instructional materials are provided by Michigan State University at no cost to the program. It is recommended that parents contact their school to learn if financial support is provided.

PROGRAM GOALS

The mathematics content follows the traditional high-level, four-year high school curriculum: two years of Algebra, Plane/Solid Geometry, Trigonometry, and Analytic Geometry. The students typically complete this content in two years and receive mathematics credit on their high school transcripts; a written evaluation documents mastery and assigns a grade for each course. Compressing learning into a shorter time frame in just one subject could make two or more years available in high school for other desired courses, e.g., a foreign language and/or college mathematics courses.

Most students completing CHAMP should be prepared to enroll in an honors high school calculus course, an Advanced Placement high school calculus course, or an honors level college calculus course.



CHAMP 2010

We would also like you to know about the opportunity for Postsecondary Enrollment, also referred to as dual enrollment, available to eligible 11th and 12th grade students and what may need to be done prior to 11th grade to become eligible. The Postsecondary Enrollment Options Act (PSEO) permits students to take classes in both the high school and a college/university simultaneously. The purpose of PSEO is to provide a wider variety of options to high school students to ensure that all students continue to be challenged.

Lansing Community College, Michigan State University, Baker College and Olivet College provide dual enrollment to admit qualified high school students to college courses while enrolled in their high schools. Specific post-CHAMP dual enrollment courses are listed on our website: http://www.gifted.msu.edu

INSTRUCTIONAL PLAN

Students are dismissed early on Thursday afternoon each week from their respective school districts, and come to the Michigan State University campus for their math classes. Each class lasts 2½ hours, 1:00 – 3:30 p.m., with a short break. Throughout the year, there are also regularly scheduled CHAMP labs on Sunday afternoons and Tuesday evenings for students needing assistance with their assignments or for those preferring to study cooperatively with other CHAMP students. Students will be given an email account for ongoing contact with the professors regarding CHAMP coursework/homework assignments. In addition, a CHAMP website is available to students for online assistance at any time between classes: http://www.forums.msu.edu/, as well as a LON-CAPA site for homework.

During the first semester, a few students may find that the program does not meet their needs. After discussion involving the student, instructor and parents, it may be determined that the student should return to the local district for mathematics instruction. All school districts have agreed to accommodate the reentry of these students into the most appropriate classes the districts offer. Because of the accelerated pace of CHAMP classes, students selecting this option should have no problems in returning to a school mathematics class.

MCHAMP

September 4 - April 23

MCHAMP, a derivative of CHAMP and a consortium of the Department of Mathematics and the Honors College of Michigan State University, provides classroom instruction at Memphis Jr. High School for qualified mathematically gifted students in grades 7-10 in the Macomb, Lapeer and St. Claire county area in east Michigan.

MCHAMP is designed so that the participating students will learn in two years the content assigned in High School Curricular Expectations (HSCE) aligned four-year high school mathematics curriculum and national core curriculum standards. In their first year of MCHAMP, students study Algebra I and Algebra II. In the second year, MCHAMP students study Geometry and a standard pre-calculus course (Trigonometry, Analytic Geometry, College Algebra, and a brief introduction to calculus concepts). Normally, students will begin MCHAMP with the study of Algebra I. Initial placement that bypasses one or more MCHAMP courses may be allowed only in very unusual circumstances.

ELIGIBILITY

Students wishing to enroll in the MCHAMP program must meet the following minimum requirements:

ACT Math: 21	and	ACT Composite: 23
SAT Math: 530	and	SAT Total: 1010

Students must submit a recommendation from their current mathematics teacher.

INFO MEETING DATES

Information Meeting
Tuesday, March 20, 2012 | 6-7 pm | Memphis Jr. High School
First Day of Class
Tuesday, September 4, 2012 | 1-3:30 pm | Memphis Jr. High School

COSTS

The cost of MCHAMP instruction per student per year is $1000 or $500 per semester. Upon acceptance into MCHAMP each student pays an initial, non-refundable $40 reservation fee confirming his/her intent to participate. Returning Year II students must pay a non-refundable $40 continuation fee confirming his/her intent to participate. The parents and/or the local school district pay tuition in the amount of $200 per student in bi-monthly payments. The tuition will be divided into five payments. The payments are due August 15, October 1, December 1, February 1 and April 1. Transportation to Memphis Jr. High School will be provided by the parents. Classrooms, textbooks, and instructional materials are provided by Michigan State University at no cost to the program. It is recommended that parents contact their school to learn if financial support is provided.

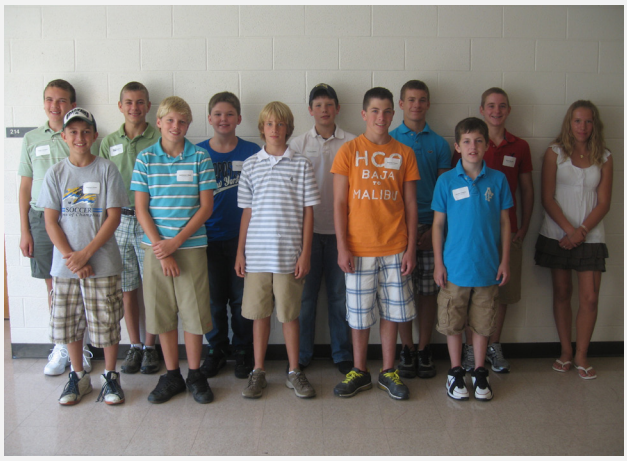
PROGRAM GOALS

The mathematics content follows the traditional high-level, four-year high school curriculum: two years of Algebra, Plane/Solid Geometry, Trigonometry, and Analytic Geometry. The students typically complete this content in two years and receive mathematics credit on their high school transcripts; a written evaluation documents mastery and assigns a grade for each course. Compressing learning into a shorter time frame in just one subject could make two or more years available in high school for other desired courses, e.g., a foreign language and/or college mathematics courses.

Most students completing MCHAMP should be prepared to enroll in an honors high school calculus course, an Advanced Placement high school calculus course, or an honors level college calculus course.

We would also like you to know about the opportunity for Postsecondary Enrollment, also referred to as dual enrollment, available to eligible 11th and 12th grade students and what may need to be done prior to 11th grade to become eligible. The Postsecondary Enrollment Options Act (PSEO) permits students to take classes in both the high school and a college/university simultaneously. The purpose of PSEO is to provide a wider variety of options to high school students to ensure that all students continue to be challenged.

Michigan State University, Baker College, University of Michigan - Flint and Kettering University provide dual enrollment to admit qualified high school students to college courses while enrolled in their high schools. Specific post-MCHAMP dual enrollment courses are listed on our website: http://www.gifted.msu.edu/.



MCHAMP 2010

INSTRUCTIONAL PLAN

Students are dismissed early on Tuesday afternoon each week from their respective school districts, and come to the Memphis Jr. High School for their math classes. Each class lasts 2½ hours, 12:25 – 2:45 p.m. for MCHAMP I and 10:00 – 12:20 p.m. for MCHAMP II, with a short break. Throughout the year there are also regularly scheduled MCHAMP labs on Thursday evenings for students needing assistance with their assignments or for those preferring to study cooperatively with other MCHAMP students. Students will be given an MSU email account for ongoing contact with the professors regarding MCHAMP coursework/homework assignments. In addition, an MCHAMP website is available to students for online assistance at any time between classes: http://www.forums.msu.edu/, as well as a LON-CAPA site for homework.

During the first semester, a few students may find that the program does not meet their needs. After discussion involving the student, instructor and parents, it may be determined that the student should return to the local district for mathematics instruction. All school districts have agreed to accommodate the reentry of these students into the most appropriate classes the districts offer. Because of the accelerated pace of MCHAMP classes, students selecting this option should have no problems in returning to a school mathematics class.

NEWCHAMP

September 5 - April 24

NEWCHAMP, a derivative of CHAMP and a consortium of the Department of Mathematics and the Honors College of Michigan State University, provides classroom instruction at Newaygo County RESA for qualified mathematically gifted students in grades 7-10 in Newaygo County and the surrounding counties in west Michigan.

NEWCHAMP is designed so that the participating students will learn in two years the content assigned in High School Curricular Expectations (HSCE) aligned four-year high school mathematics curriculum and national core curriculum standards. In their first year of NEWCHAMP, students study Algebra I and Algebra II. In the second year, NEWCHAMP students study Geometry and a standard pre-calculus course (Trigonometry, Analytic Geometry, College Algebra, and a brief introduction to calculus concepts). Normally, students will begin NEWCHAMP with the study of Algebra I. Initial placement that bypasses one or more NEWCHAMP courses may be allowed only in very unusual circumstances.

ELIGIBILITY

Students wishing to enroll in the NEWCHAMP program must meet the following minimum requirements:

ACT Math: 21	and	ACT Composite: 23
SAT Math: 530	and	SAT Total: 1010

Students must submit a recommendation from their current mathematics teacher.

INFO MEETING DATES

Information Meeting
Wednesday, March 28, 2012 | 6-7 pm | Newaygo County RESA
First Day of Class
Wednesday, September 5, 2012 | 1-3:30 pm | Newaygo County RESA

COSTS

The cost of NEWCHAMP instruction per student per year is $1000 or $500 per semester. Upon acceptance into NEWCHAMP each student pays an initial, non-refundable $40 reservation fee confirming his/her intent to participate. Returning Year II students must pay a non-refundable $40 continuation fee confirming his/her intent to participate. The parents and/or the local school district pay tuition in the amount of $200 per student in bi-monthly payments. The tuition will be divided into five payments. The payments are due August 15, October 1, December 1, February 1 and April 1. Transportation to Memphis Jr. High School will be provided by the parents. Classrooms, textbooks, and instructional materials are provided by Michigan State University at no cost to the program. It is recommended that parents contact their school to learn if financial support is provided.

PROGRAM GOALS

The mathematics content follows the traditional high-level, four-year high school curriculum: two years of Algebra, Plane/Solid Geometry, Trigonometry, and Analytic Geometry. The students typically complete this content in two years and receive mathematics credit on their high school transcripts; a written evaluation documents mastery and assigns a grade for each course. Compressing learning into a shorter time frame in just one subject could make two or more years available in high school for other desired courses, e.g., a foreign language and/or college mathematics courses.

CHAMP 1991

Most students completing NEWCHAMP should be prepared to enroll in an honors high school calculus course, an Advanced Placement high school calculus course, or an honors level college calculus course.

We would also like you to know about the opportunity for Postsecondary Enrollment, also referred to as dual enrollment, available to eligible 11th and 12th grade students and what may need to be done prior to 11th grade to become eligible. The Postsecondary Enrollment Options Act (PSEO) permits students to take classes in both the high school and a college/university simultaneously. The purpose of PSEO is to provide a wider variety of options to high school students to ensure that all students continue to be challenged.

Michigan State University; Baker College- Muskegon, Newaygo; Muskegon Community College; Ferris State College and Grand Valley State College provide dual enrollment to admit qualified high school students to college courses while enrolled in their high schools. Specific post-CHAMP dual enrollment courses are listed on our website: http://www.gifted.msu.edu

INSTRUCTIONAL PLAN

Students are dismissed early on Wednesday morning each week from their respective school districts, and come to the Newaygo RESA for their math classes. Each class lasts 2½ hours, 11:00 a.m. – 1:30 p.m., with a short break. Throughout the year, there are also regularly scheduled NEWCHAMP labs on Monday evenings from 5:30 - 7:30 p.m. for students needing assistance with their assignments or for those preferring to study cooperatively with other NEWCHAMP students. Students will be given an MSU email account for ongoing contact with the professors regarding NEWCHAMP coursework/homework assignments. In addition, an NEWCHAMP website is available to students for online assistance at any time between classes: http://www.forums.msu.edu/ as well as a LON-CAPA site for homework.

During the first semester, a few students may find that the program does not meet their needs. After discussion involving the student, instructor and parents, it may be determined that the student should return to the local district for mathematics instruction. All school districts have agreed to accommodate the reentry of these students into the most appropriate classes the districts offer. Because of the accelerated pace of NEWCHAMP classes, students selecting this option should have no problems in returning to a school mathematics class.

ALL CHAMP CLASS CONTENT & PROCEDURES

The instructor prepares lessons that provide students with a conceptual-theoretical framework for the content of the course. Practical examples are discussed only to assist student understanding rather than to develop total mastery of a particular skill at that time. New material is introduced at a pace much faster than occurs in the usual classroom. These students typically require this pace in order to remain challenged.

In class, the instructor reviews unresolved homework problems, introduces new material, gives spot quizzes and longer tests, and assigns homework which takes into account both previously studied material and concepts just introduced. Homework assignments, taking the average student six to eight hours to complete, are collected at the beginning of each class. This homework is graded, commented on by an assistant, and returned to and discussed with the student before the end of that day's class. The forum is an online component for all CHAMP students. Students will be required to complete some online statistics coursework during the Algebra I course that will be submitted to their instructor for evaluation.

Experience suggests that some students begin the program expecting to be able to work all problems quickly, and they can become frustrated when they are unsure of what to do immediately. Such students need to learn perseverance with mental tasks. Other students tend to view any effort that is less than 100% correct as a failure. As the course proceeds, these students develop a more mature perspective on learning. Homework helps to solidify concepts presented in class and to provide a realistic challenge, requiring these students to develop problem-solving skills and to persevere in the face of less-than-instant-success. Students may feel overwhelmed at first by the volume of the homework assigned, but most adjust to what is required.

EVALUATIONS

Evaluation of the Program

Annual assessment of the program involves compilation and review of information gathered from university and local school personnel, parents, students and former students by the CHAMP Consortium Committee. Expectations in the Michigan high school and national core curriculum have been incorporated into the CHAMP/MCHAMP/NEWCHAMP Curriculum.

Evaluation of the Student

The most direct measure of the program's success is the students' demonstrated progress in mathematical content as evidenced by performance on nationally standardized examinations and tests devised by the instructors. Post-test mastery is defined as achievement at the 85th percentile and above on nationally standardized achievement tests recommended by Johns Hopkins University. Pre- and post-test results from CHAMP/MCHAMP/NEWCHAMP suggest that students were presented material not previously known to them, and that they were successful in mastering it.

Progress in mastering subject matter is monitored regularly through graded weekly homework assignments, quizzes, and teacher-constructed tests. Mid-term reports and end-of-semester (January and May) written evaluations are sent to each student's school district, family and ISD CHAMP Consortium representative. These reports include details on progress in content, participation and letter grades. Student-teacher conferences are scheduled when needed, and student self-evaluation is strongly encouraged and developed.

In addition to monitoring subject matter achievement, the social and emotional needs of the participating students are addressed periodically through group meetings and individual conferences with students and family as necessary.

RESOURCES

First Year Texts:

Expressions, Equations, and Applications by Paul A. Foerster (Algebra I)

Algebra and Trigonometry: Functions and Applications by Paul A. Foerster (Algebra II)

Second Year Texts:

Geometry by Moise and Downs (Geometry)

Advanced Mathematics: A Pre-calculus Course by Brown and Robbins (College Algebra/Trigonometry)

PROGRAM CONTENT

FIRST YEAR

Algebra I

Polynomials: terminology, evaluation, algebraic combinations, degree, long division

Factoring: prime and common factors, difference of squares, quadratic trinomials, factoring by grouping

Rational Expressions: dividing by monomials, simplifying by factoring, algebraic combinations, least common multiples, combinations of rational expressions

Linear Equations: roots, literal equations, solutions of equations with rational expressions, story problems

Linear Inequalities

Graphs and the Cartesian coordinate system

Positive integral exponents and roots

Graphs of linear functions

Functions: notation, evaluation, inverse of functions

Lines: slope, various forms for equations of lines, parallel and perpendicular lines

Variation: direct, inverse, joint

Quadratic equations: solutions by factoring, completing the square, the quadratic formula

Story problems involving linear and quadratic equations

Algebra II

Factoring of sums and differences of cubes

Exponents: zero, negative exponents, laws of exponents, rational exponents, exponential growth and decay

Radicals: rules, notation, combinations, rationalizing the denominator

Complex numbers

Logarithms: definition, properties, antilogs, computations

Quadratic equations: solutions by factoring, quadratic formula, character of solutions, equations involving "disguised quadratics"

Inequalities: solutions, graphing linear and quadratic inequalities

Simultaneous equations: solutions by graphing, elimination, and substitution, linear programming in two variables

Simultaneous inequalities: solutions by graphing

Direct and inverse variation

Conic sections in simple positions: basic features of graphs of circles, parabolas, ellipses and hyperbolas, algebraic solutions of quadratic systems, translation of axes

Polynomial and rational functions: remainder theorem, factor theorem, synthetic division, fundamental theorem of algebra, factors and zeros, Descartes rule of signs, rational solutions of polynomial equations

Graphs of rational functions: intercepts, asymptotes, symmetry, asymptotic behavior

Binomial theorem

Sequences and series: arithmetic and geometric sequences, infinite geometric series, summation notation, sums of arithmetic and geometric series

Matrices: determinants and inverses of 2 x 2 and 3 x 3 matrices, Cramer's rule

Problem solving in an algebraic setting

A brief introduction to trigonometry: sines, cosines, and tangents, solutions to right triangles

SECOND YEAR

Geometry

Introduction to mathematical logic: undefined terms, definitions, postulates, theorems
Methods of proof: direct proof, indirect proof
Points, lines, planes, length, angle measurement, perpendicularity
Parallel lines, parallel postulate
Angle measures in triangles and polygons
Triangle congruence postulates and theorems: SAS, ASA, SSS, SAA
Right triangles: the Pythagorean theorem, the hypotenuse-leg theorem
Similarity of triangles and polygons
Area and perimeter of triangles, polygons, and circles
Circles: chords, angle measurement for central and inscribed angles
Medians of a triangle, incenter, circumcenter, concurrence theorems for the medians, angle bisectors, and perpendicular bisectors of sides
Inequalities in geometry
Coordinate geometry in the plane and space
Transformations in the plane: reflections, translations, rotations, rigid motions, similarity transformations
Informal geometry in space: skew lines, parallel planes, perpendiculars to planes, dihedral angles, volume and surface areas, prisms, pyramids, spheres, cones, cylinders

College Algebra/Trigonometry

Functions: zeros, graphs, inverses
Exponents and logarithms, growth and decay
Basic analytic geometry: loci, intercepts, symmetry, lines, distance formula, midpoint formula slope, parallel and perpendicular lines
Parametric equations, distance from a point to a line, angle between lines, linear inequalities
Graphs of algebraic relations: loci, nonlinear equations and inequalities
Analytic geometry in space: coordinates, distance formula, direction cosines, planes, lines
Angles and radian measure
General definition of trigonometric functions: values at convenient angles
Graphs of trigonometric functions: periodicity, ranges
Trigonometric equations and inequalities
Trigonometric identities: addition of angles formulas
Inverse trigonometric functions
Laws of sines and cosines: solution of triangles
Circular and harmonic motion
Graphs of composite trigonometric functions
Vectors
Polar coordinates: graphs using polar coordinates
Conic sections, vertices, asymptotes, graphs
Sequences and series
Systems of linear equations, matrices
Probability and counting problems

RESPONSIBILITIES

For Students

1. Attend classes regularly.
2. Complete assigned homework regularly.
3. Keep parent(s)/guardian(s) informed of weekly graded homework and quizzes.
4. Attend labs as desired or assigned.
5. Exhibit appropriate classroom behavior.
6. Maintain satisfactory level of performance in regular school course work.

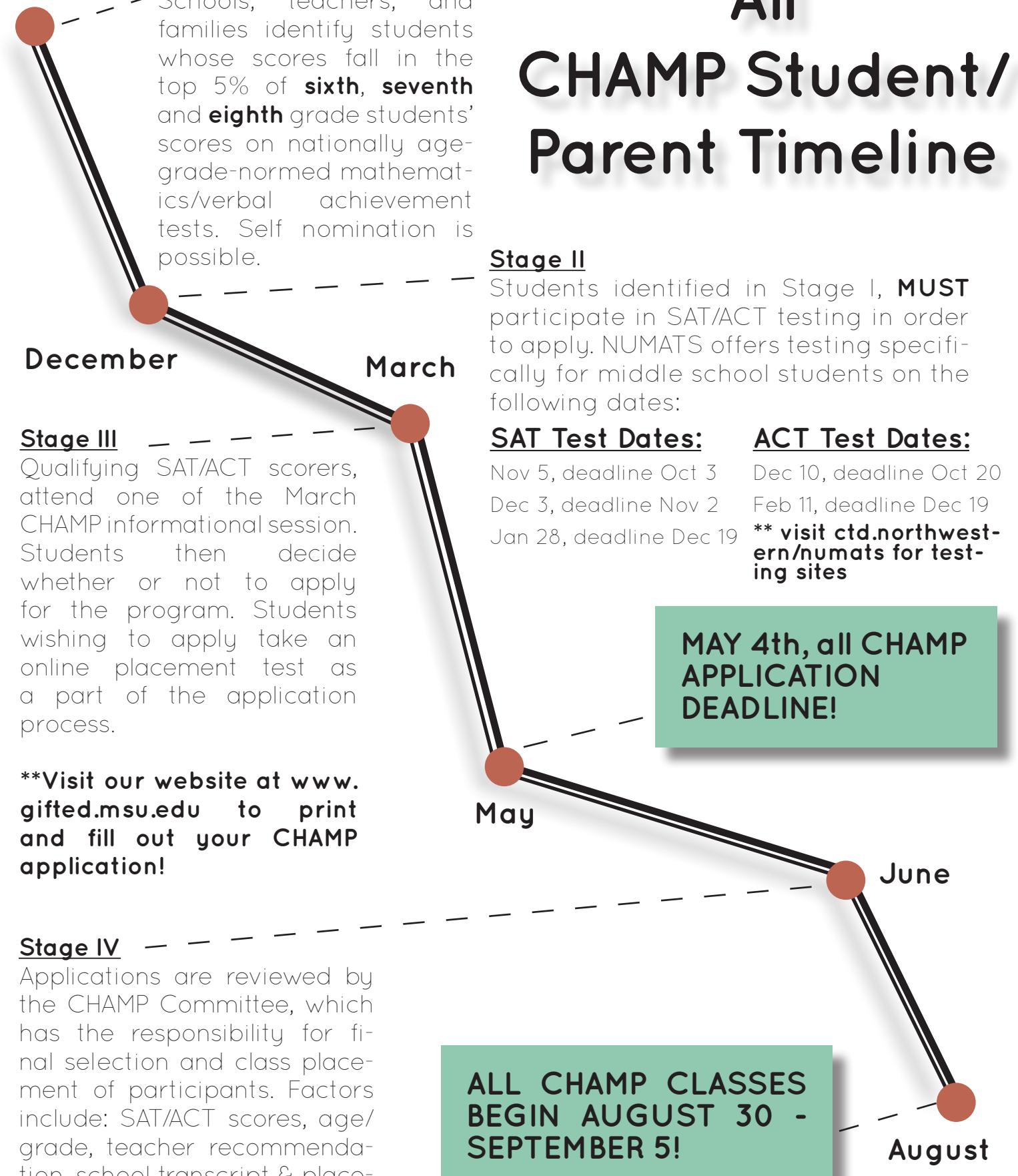
For Parents/Guardians

1. Transport student to and from class once a week.
2. Attend an initial information session, fall orientation session, and conferences.
3. Support and encourage the student.
4. Review weekly graded homework and quizzes with the student.
5. Communicate with the professor and local or ISD CHAMP Consortium representative if there is a problem.
6. Provide student with a graphing calculator.

For the Local District

1. Release students to attend class at designated location during their school day.
2. Agree that these classes will be accepted in lieu of in-school required mathematics classes.
3. Recognize this course of study and record credits and grades on high school transcripts.
4. Grant high school credit for demonstrated mastery of content (up to four years of high school math).
5. Identify a local district contact person for CHAMP/MCHAMP/NEWCHAMP

All CHAMP Student/ Parent Timeline



Stage I
Schools, teachers, and families identify students whose scores fall in the top 5% of **sixth**, **seventh** and **eighth** grade students' scores on nationally age-grade-normed mathematics/verbal achievement tests. Self nomination is possible.

Stage II
Students identified in Stage I, **MUST** participate in SAT/ACT testing in order to apply. NUMATS offers testing specifically for middle school students on the following dates:

SAT Test Dates:
Nov 5, deadline Oct 3
Dec 3, deadline Nov 2
Jan 28, deadline Dec 19

ACT Test Dates:
Dec 10, deadline Oct 20
Feb 11, deadline Dec 19
**** visit ctd.northwestern/numats for testing sites**

Stage III
Qualifying SAT/ACT scorers, attend one of the March CHAMP informational session. Students then decide whether or not to apply for the program. Students wishing to apply take an online placement test as a part of the application process.

****Visit our website at www.gifted.msu.edu to print and fill out your CHAMP application!**

MAY 4th, all CHAMP APPLICATION DEADLINE!

Stage IV
Applications are reviewed by the CHAMP Committee, which has the responsibility for final selection and class placement of participants. Factors include: SAT/ACT scores, age/grade, teacher recommendation, school transcript & placement score.

ALL CHAMP CLASSES BEGIN AUGUST 30 - SEPTEMBER 5!

ISHALL

September 5 - April 24

ISHALL, a consortium of the Clinton, Eaton, Ingham and Shiawassee Intermediate School Districts, in partnership with the Department of English and the Honors College of Michigan State University, is providing classroom instruction for qualified language arts students in grades 7-10.

ISHALL is designed so that the participating students will learn in two years the content assigned in Michigan High School Curriculum Expectations (HSCE) aligned four-year high school English curriculum and national core curriculum standards. Students will study a wide range of texts and media in literature and the humanities including novels, biographies, plays, poetry, and film. Students will also be exposed to a variety of different historical movements and types of literature, such as romanticism, enlightenment, Shakespearean drama, and comedy, in addition to modern works.

ELIGIBILITY

Students wishing to enroll in the ISHALL program must meet the following minimum requirements:

ACT English: 21 and ACT Critical Reading: 22

SAT Critical Reading: 520

Students must submit a recommendation from their current English teacher.

INFO MEETING DATES

Information Meeting

Thursday, March 15, 2012 | 7-8 pm | B108 Bessey Hall

ISHALL Diagnostic Testing

Sunday, April 15, 2012 | 2-3 pm | C103 Wells Hall

Saturday, April 21, 2012 | 10-11 am | C103 Wells Hall

First Day of Class

Wednesday, September 5, 2012 | 8-10:10 am | Bessey Hall

COSTS

The full cost of ISHALL year I instruction per student per year is approximately $1000. Upon acceptance into ISHALL, each student pays an initial $40 reservation fee confirming his/her intent to participate. The parents and/or the local school district pay tuition in the amount of $1000 per student during the fall semester. In addition while a textbook and support literature books are provided, a $100 book deposit is due at the beginning of the semester and will be refunded once all books have been returned. There will a $40 continuation fee for Year II students returning to the program. Electronic billing will occur bimonthly . Tuition will be divided into five payments, due August 15 (includes book deposit), October 1, December 1, February 1 and April 1. Transportation will be provided by the parents. Classrooms are provided by Michigan State University at no cost to the program. It is recommended that parents conact their school to learn if financial aid is provided.

PROGRAM GOALS

The English content follows the Michigan HSCE aligned four-year high school curriculum and the national core curriculum. ISHALL students typically complete this content in two years and receive English credit on their high school transcripts. A written evaluation documents mastery and assigns a grade for each course. Compressing learning into a shorter time frame in just one subject could make two or more years available for other desired high school courses, e.g., a second foreign language and/or college English courses.

We would also like you to know about the opportunity for Postsecondary Enrollment, also referred to as dual enrollment, available to eligible 11th and 12th grade students and what may need to be done prior to 11th grade to become eligible. The Postsecondary Enrollment Options Act (PSEO) permits students to take classes in both the high school and a college/university simultaneously. The purpose of PSEO is to provide a wider variety of options to high school students to insure that all students continue to be challenged.

Lansing Community College, Michigan State University, Baker College and Olivet College provide dual enrollment to admit qualified high school students to college courses while enrolled in their high schools.

PROGRAM FEATURES

- Each course is taught by an MSU English Professor who is assisted by a graduate student with experience in and aptitude for teaching literature and writing.
- Each course is open only to eligible students who have demonstrated high skill in reading, writing, and other skills associated with language arts, and who have the commitment to pursue language arts in an intensive accelerated course while maintaining satisfactory performance in non-English middle school/high school courses.
- In addition to weekly classes, a regular study session is scheduled on Sunday afternoons to provide students with an opportunity to work through the writing process and receive help on both current and previous material. Attendance at this session is optional, but strongly encouraged for students who feel the need for some help or feedback in addition to that received in class.
- Small classes of a size optimal for fostering discussion while permitting the kind of individual attention often necessary for working through issues of expression.
- All ISHALL students should have a computer capable of running word processing programs compatible with MS Word. Students should also have a printer and an internet connection so they can have access to ANGEL, on-line features of textbooks, and the MSU library resources.
- ISHALL emphasizes the wealth and variety of expressive possibilities as well as modes of critical engagement.

WORKING IN CLASS
ISHALL 2011

ISHALL 2010

RESPONSIBILITIES

For Students

1. Attend ISHALL classes regularly.
2. Complete assigned homework regularly.
3. Keep parent(s)/guardian(s) informed of weekly graded homework and quizzes.
4. Attend ISHALL Labs as desired or assigned.
5. Exhibit appropriate classroom behavior.
6. Maintain satisfactory level of performance in regular school course work.

For Parents/Guardians

1. Transport student to and from class once a week.
2. Attend an initial information session, fall orientation session, and conferences.
3. Support and encourage the student.
4. Review classwork with the student.
5. Communicate with the ISHALL professor and local or ISD ISHALL Consortium representative if there is a problem.
6. Provide student with an access to a computer with word processing capabilities.

For the Local District

1. Release students to attend class at Michigan State University during their school day.
2. Agree that these classes will be accepted in lieu of in-school required English classes.
3. Recognize this course of study and record credits and grades on high school transcripts.
4. Grant high school credit for demonstrated mastery of content (up to four years of high school English).
5. Identify a local district contact person for ISHALL.

Be a Part of the Tradition...

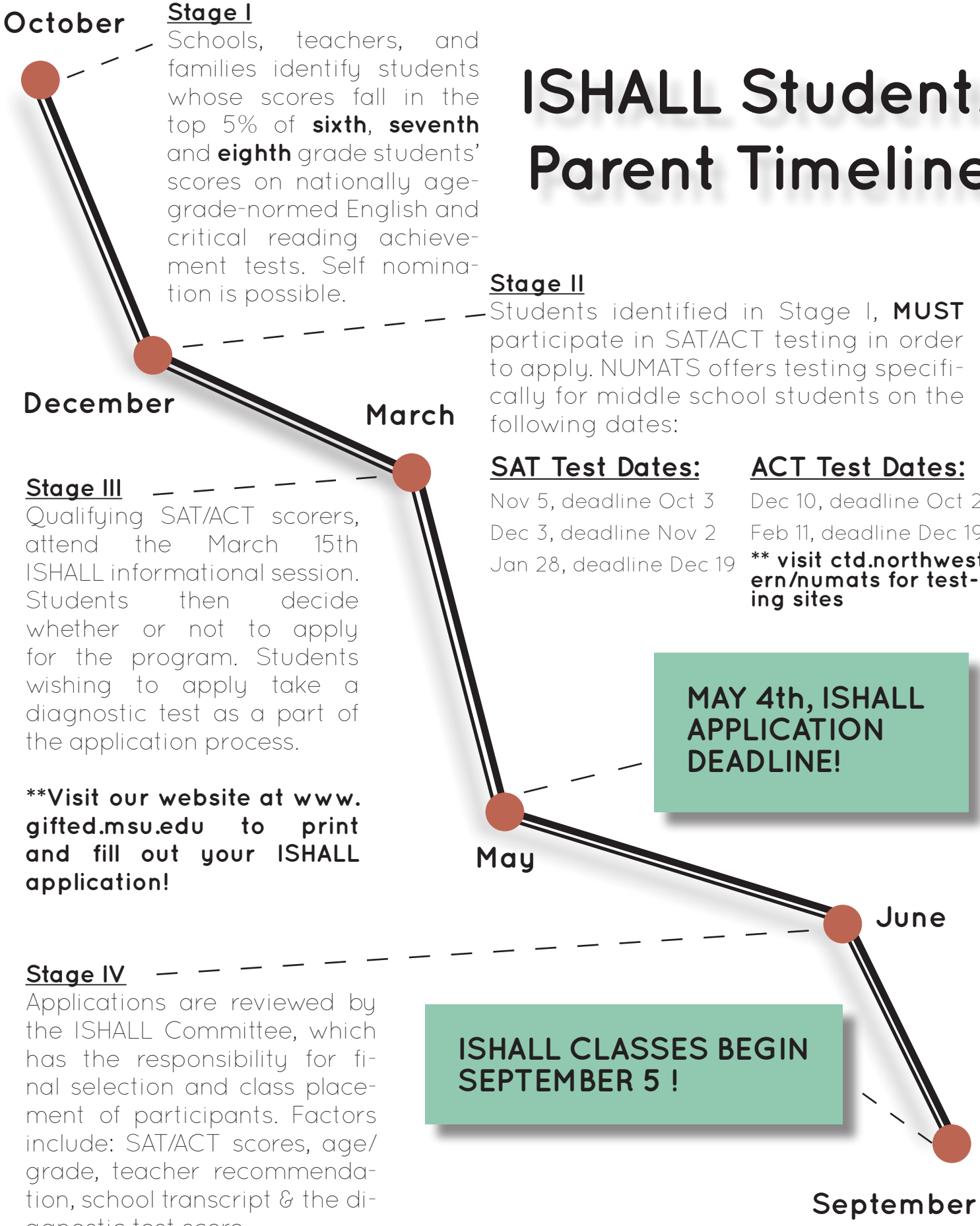
Advancing Knowledge.
Transforming Lives.

Go Global. **Pioneer.** **Serve.**

MICHIGAN STATE UNIVERSITY
HONORS
COLLEGE

www.honorscollege.msu.edu

ISHALL Student/ Parent Timeline



Stage I
Schools, teachers, and families identify students whose scores fall in the top 5% of **sixth**, **seventh** and **eighth** grade students' scores on nationally age-grade-normed English and critical reading achievement tests. Self nomination is possible.

Stage II
Students identified in Stage I, **MUST** participate in SAT/ACT testing in order to apply. NUMATS offers testing specifically for middle school students on the following dates:

SAT Test Dates:
Nov 5, deadline Oct 3
Dec 3, deadline Nov 2
Jan 28, deadline Dec 19

ACT Test Dates:
Dec 10, deadline Oct 20
Feb 11, deadline Dec 19
**** visit ctd.northwestern/numats for testing sites**

Stage III
Qualifying SAT/ACT scorers, attend the March 15th ISHALL informational session. Students then decide whether or not to apply for the program. Students wishing to apply take a diagnostic test as a part of the application process.

****Visit our website at www.gifted.msu.edu to print and fill out your ISHALL application!**

MAY 4th, ISHALL APPLICATION DEADLINE!

Stage IV
Applications are reviewed by the ISHALL Committee, which has the responsibility for final selection and class placement of participants. Factors include: SAT/ACT scores, age/grade, teacher recommendation, school transcript & the diagnostic test score.

ISHALL CLASSES BEGIN SEPTEMBER 5 !

LEAF

August 30 - April 25

LEAF, a consortium of the Clinton, Eaton, Ingham and Shiawassee Intermediate School Districts in partnership with the Department of Romance and Classical Languages and the Honors College of Michigan State University, is providing classroom instruction for qualified language arts/French highly academically able students in grades 7-11.

LEAF is designed so that the participating students will learn in two years the content usually assigned to the traditional four-year high school French language curriculum. In their first year of LEAF, students will not only cover the material equivalent to French 1 and French 2, but would have also worked on additional enrichment activities to enhance student proficiency. In the second year, LEAF students will study material equivalent to French 3 and French 4 with special emphasis on developing and refining the four skills: reading, writing, speaking and listening. In addition, various in-class and out of class opportunities will be provided to students to prepare for the AP French test if they wish to take it.

ELIGIBILITY

Students wishing to enroll in the LEAF program must meet the following minimum requirements:

ACT English: 21 and ACT Critical Reading: 22

SAT Critical Reading: 520

Students must submit a recommendation from a current English/foreign language teacher. Those students already enrolled in French classes may take a diagnostic test to move directly into the second year program.

INFO MEETING DATES

Information Meeting

Thursday, March 22, 2012 | 6:30-7:30 pm | B108 Bessey Hall

First Day of Class

Thursday, August 30, 2012 | 8-10:10 am | Bessey Hall

COSTS

The full cost of LEAF instruction per student per year is approximately $1000. Upon acceptance into LEAF, each student pays an initial $40 reservation fee confirming his/her intent to participate. The parents and/or the local school district pay tuition in the amount of $1000 per student during the fall semester. There will a $40 continuance fee for students participating in the second year of the program. Electronic billing will occur bimonthly . Tuition will be divided into five payments. Payments will be due August 15 (includes book deposit), October 1, December 1, February 1 and April 1. Transportation will be provided by the parents. Classrooms are provided by Michigan State University at no cost to the program. It is recommended that parents contact their school to learn if financial aid is provided.

PROGRAM GOALS

The French content follows the Michigan HSCE aligned high-level, high school curriculum. LEAF students typically complete this content in two years, and receive French credit on their high school transcripts; a written evaluation documents mastery and assigns a grade for each course. Compressing learning into a shorter time frame in just one subject could make two or more years available for other desired courses, e.g., a second foreign language and/or college French courses.

Lansing Community College, Michigan State University, and Olivet College have modified admissions procedures to admit qualified high school students to college courses while these students remain enrolled in their high schools.

We would also like you to know about the opportunity for Postsecondary Enrollment, also referred to as dual enrollment, available to eligible 11th and 12th grade students and what may need to be done prior to 11th grade to become eligible. The Postsecondary Enrollment Options Act (PSEO) permits students to take classes in both the high school and a college/university simultaneously. The purpose of PSEO is to provide a wider variety of options to high school students to insure that all students continue to be challenged.

INSTRUCTIONAL PLAN

Students attend classes each week Thursday on the Michigan State University campus. Families are responsible for transportation. Each class lasts 3 hours, 4:00 – 7:00 p.m., with short breaks. Throughout the year, there are also regularly scheduled LEAF labs on Sunday afternoons for students wishing assistance with their assignments or for those preferring to study cooperatively with other LEAF students. Students will be offered an email account for ongoing contact with the instructors regarding LEAF coursework/homework assignments. In addition, an LEAF ANGEL website is available to students for online assistance at any time between classes which will include online reference materials.

During the first semester, a few students may find that the program does not meet their needs. After discussion involving the student, instructor and parents, it may be determined that a student should return to the local district for French instruction, if available. All school districts have agreed to accommodate the reentry of these students into the most appropriate classes the districts offer. Because of the accelerated pace of LEAF classes, students selecting this option should have no problems in returning to a school French class, if one is available.

LEAF CLASS CONTENT & PROCEDURES

The instructor prepares class activities that provide students with a conceptual and theoretical framework for the mastery of the 4 skills in French: speaking, reading, writing and listening. The LEAF curriculum is based on the Communicative Language Teaching Methodology. The underlying principle of this method is to encourage language learning through the use of active exposure and communication in the target language. A diagnostic test will be given after the first year to evaluate each student's progress entering the second year.

Starting from the first semester, students will be exposed to the target language and culture in the classroom. The various components like grammar and vocabulary will be introduced through a variety of input activities which focus on

students' inductive reasoning abilities. For first-semester students, the input activities will be accompanied by visual support (pictures, TPR, video, mime, realia, etc.). As they progress with their language acquisition, the input activities will make more use of vocabulary and structures covered in class. Classroom time ranges between input presentations, reinforcement of the concepts, group work assignments and open-ended tasks with more individual attention and student feedback. Group work assignments and open-ended tasks will include listening and speaking activities with frequent practice in pronunciation.

Homework assignments will fall under two main categories: immediate application of the concepts covered in class and application of concepts to carry out more open-ended and communicative tasks. The first homework will serve as practice to reinforce the grammar and vocabulary covered in class. Students will be required to turn in the first assignment in the middle of the week to receive feedback about their understanding of the material covered. Once students display a strong understanding of the material, they will work on the second homework assignment that consists of practical application of the concepts. Students will be doing the homework both online and on paper. In addition to written homework, students will be required to record oral exercises in French and submit them online.

Students' writing skills will be taught using a variety of tools depending on proficiency level. For the first semester, students will be required to turn in one composition at the end of the semester. This composition will follow a process-oriented approach where students will be guided in the different stages like planning, writing and editing. For subsequent semesters, the number of compositions will change accordingly with student progress in the language. As students are exposed to more literary readings in French, the writing assignments will incorporate some of the ideas covered in the reading. In the third and fourth semesters, students will be trained to craft well-supported logical arguments as a way to produce and present their ideas. The synergy of these kinds of activities makes students more sensitive readers and more effective writers. This would also help students understand the richness of meaning and expression in French literature and incorporate them in their own writing.

RESPONSIBILITIES

Student Responsibilities

1. Attend LEAF classes regularly.
2. Complete assigned homework regularly.
3. Keep parent/s informed of weekly graded homework and quizzes.
4. Attend LEAF Labs as desired or assigned.
5. Exhibit appropriate classroom behavior.
6. Maintain satisfactory level of performance in regular school course work.

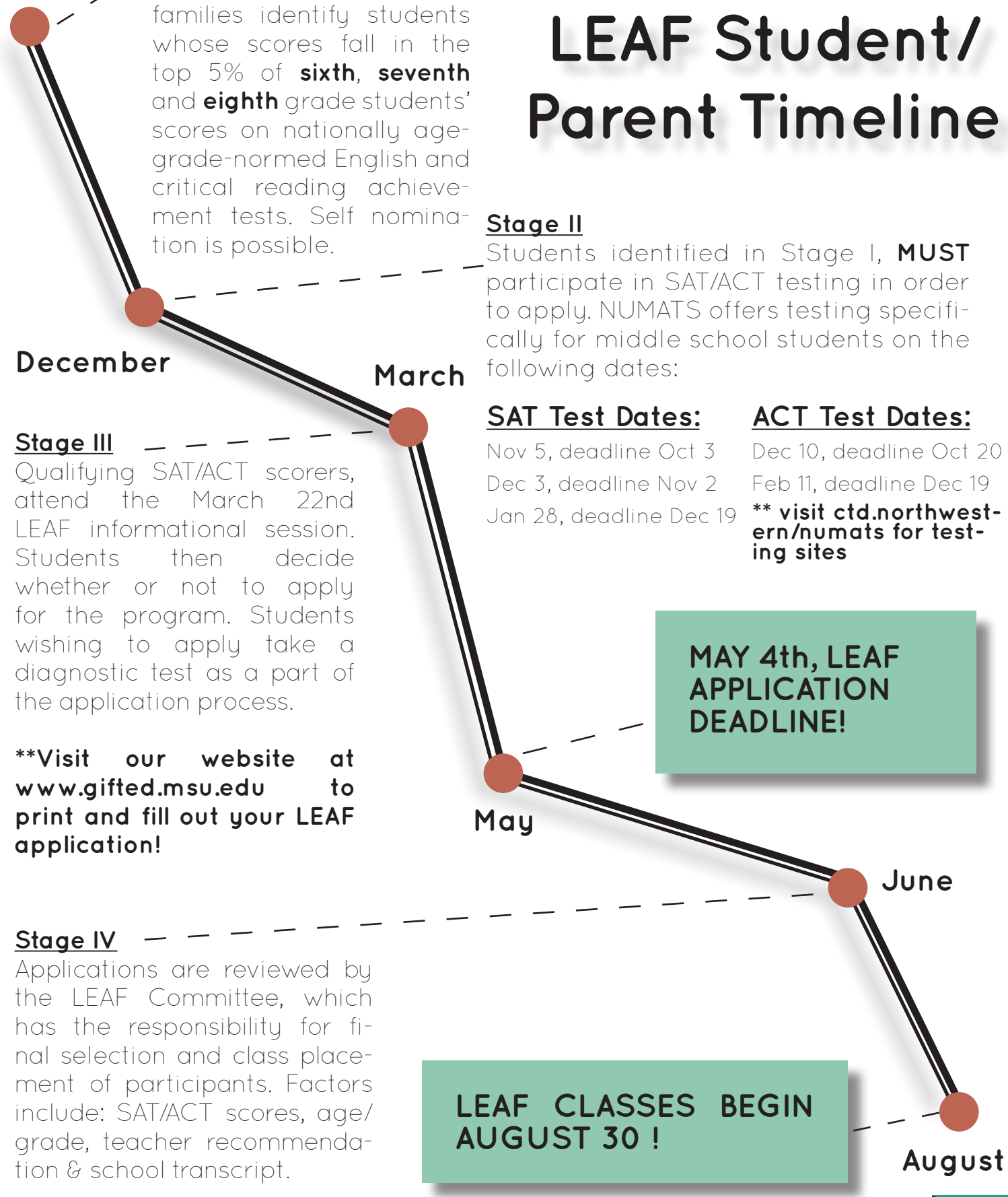
Parent Responsibilities

1. Transport student to and from class once a week.
2. Attend an initial information session, fall orientation session, and conferences.
3. Support and encourage the student.
4. Review weekly graded homework and quizzes with the student.
5. Communicate with the LEAF professor and local or ISD LEAF Consortium representative if there is a problem.
6. Provide student with an access to a computer with word processing capabilities.

Local District Responsibilities

1. Agree that these classes will be accepted in lieu of in-school required French classes.
2. Recognize this course of study and record credits and grades on high school transcripts.
3. Grant high school credit for demonstrated mastery of content (up to four years of high school French).
4. Identify a local district contact person for LEAF.

LEAF Student/ Parent Timeline



Stage I
Schools, teachers, and families identify students whose scores fall in the top 5% of **sixth**, **seventh** and **eighth** grade students' scores on nationally age-grade-normed English and critical reading achievement tests. Self nomination is possible.

Stage II
Students identified in Stage I, **MUST** participate in SAT/ACT testing in order to apply. NUMATS offers testing specifically for middle school students on the following dates:

SAT Test Dates:
Nov 5, deadline Oct 3
Dec 3, deadline Nov 2
Jan 28, deadline Dec 19

ACT Test Dates:
Dec 10, deadline Oct 20
Feb 11, deadline Dec 19
**** visit ctd.northwestern/numats for testing sites**

Stage III
Qualifying SAT/ACT scorers, attend the March 22nd LEAF informational session. Students then decide whether or not to apply for the program. Students wishing to apply take a diagnostic test as a part of the application process.

****Visit our website at www.gifted.msu.edu to print and fill out your LEAF application!**

MAY 4th, LEAF APPLICATION DEADLINE!

Stage IV
Applications are reviewed by the LEAF Committee, which has the responsibility for final selection and class placement of participants. Factors include: SAT/ACT scores, age/grade, teacher recommendation & school transcript.

LEAF CLASSES BEGIN AUGUST 30 !

Summer Programs

HIGH ACHIEVERS 1989

"It's hard to believe what I accomplished in just two short weeks. This experience is one that I will always remember, and I am so grateful for the opportunity that was given to me."

GATE summer programs are designed to help students take advantage of the warm summer months in fun, constructive ways. Programs include commuter and residential options, with courses ranging from technology to philosophy. Summer programs offer a chance to experience college coursework and college life in a fun and relaxing environment for high achieving middle and high school students.

CSI FORENSICS PROGRAM

Crime Scene Investigation

Grades: 7-9
2012 Program Dates
June 24-30

HIGH ACHIEVERS

College Courses for High Achieving Students

Grades: 9-12
2012 Program Dates
Session I: June 17-July 12
Session II: July 8-August 2

MST@MSU

Mathematics, Science & Technology

Grades: 7-9
2012 Program Dates
July 15-28

CSI Forensic Program

June 17 - 23

The CSI Forensic Science Crime Scene Program at Michigan State University is a one-week residential program from June 24 - 30. The curriculum is intended for academically able students who are currently in grades 7, 8 and 9 and at least 12 years old. All students will be working in a university setting with professionals who work in the field of forensic science.

Forensic Science is the application of science for the purposes of law. Students, through a variety of educational presentations and hands-on experiences, will learn how their acquired scientific knowledge can be applied to criminal investigation. Throughout the week, students will have the opportunity to apply their creativity and investigative skills working as a CSI with real crime scene equipment on several mock crime scenes.

All students will be housed in the Red Cedar Neighborhood on the campus of Michigan State University in East Lansing, Michigan. The program enrollment is limited to 50 students. Apply online at gifted.msu.edu by April 6.

ELIGIBILITY

Students must currently be in grades 7, 8 or 9 during the 2011-2012 school year and a minimum of 12 years old to enroll. They must also meet the following criteria:

Provide documentation of strong standardized test scores (SAT, ACT, Tier I MEAP in Science)
GPA of 3.5 or above
Have a positive teacher recommendation from a current science teacher
Have a strong interest in science

COSTS

NEWLY REDUCED PRICE! The program cost of $1,250 includes the following:

All instruction
Evening recreational activities
Residential housing, meals, and supervision
Course materials and supplies
T-shirt

Costs not covered:

Program costs do not include transportation to and from Michigan State University. Parents/guardians must arrange for the student

PIG AUTOPSY, CSI 2011

to arrive at the campus for the check-in at 2 p.m. on the Sunday the program begins. They must also arrange for the student to leave the campus after the closing program at noon on Saturday, the last day of the program. Lansing's Capital Regional International Airport, located 20 minutes from Michigan State University, provides air transportation services for the mid-Michigan area. Parents are responsible for transportation of their child between campus and the airport. Any transportation, supervision, housing and food costs from students arriving early or leaving late will be charged to the parents/guardians. Program costs do not include personal spending money, and while students are encouraged to bring snacks, there are vending machines available in the dormitory lobby.

Additional Payment Information:

- Payment for this program can be made by credit card on our web site or by check. Checks should be made payable to Michigan State University. Payment of $150 ($100 tuition deposit and $50 application fee) must be made in order for an application to be processed.
- Applications received after April 6, 2012 must include a $10 late fee.
- The deadline for payment of the tuition balance is May 15, 2012. Contact our office if a payment plan is needed.
- The application fee of $50 is refunded only if the student is not accepted into the program.
- The tuition deposit or tuition balance is refunded only if: 1) the student cannot attend because of a medical emergency or serious medical problem documented by a doctor, or 2) the student is not accepted into the program.
- A request to withdraw must be submitted **in writing** to the Office of Gifted and Talented Education Programs
- Refunds will be processed in 6 – 8 weeks.

RESIDENTIAL LIVING

The program coordinator and resident advisors (RAs) are responsible for providing a comfortable and friendly atmosphere in the residence hall. The RAs are college students who have been selected because they have a commitment to education and because of their ability to interact well with young people. Before the opening of the program, the RAs receive training in regard to rules, regulations, and safety requirements as related to the students' welfare. The ratio of students to RA is at most 10:1. RAs will walk students to their morning lectures, walk students to and from lunch, to the afternoon labs or outdoor mock crime scene activities, and then back to the residence hall for dinner. They also oversee all evening activities.

Students will be housed in a residential hall on the campus of Michigan State University. Each student will be assigned a roommate, and students cannot choose their own roommate(s). Students will be given many opportunities to establish new friendships during evening recreational activities and to interact with others in smaller groups. It is important to note that this is a closed program, meaning that the students are expected to remain on campus throughout the week. Students will be assigned MSU e-mail accounts to e-mail home during the week. Each residence hall has a computer lab, and students will have computer lab time each evening.

Along with study time each night, students will have opportunities during their stay on the MSU campus to participate in extra-curricular activities. Along with access to the IM gymnasiums, students will also make use of other facilities to give them an overall introduction to MSU. RAs will accompany and supervise students in these activities.

CURRICULUM

This Crime Scene Investigation (CSI) camp is designed to teach students about the science and techniques used in the investigation of crimes. The camp is designed to challenge students and to provide them with the real world experience of a forensic scientist. The instructors of the CSI camp are experts in the field and will provide students with a general overview of many of the fields of forensic science as well as provide them with practical hands-on experiences. Students will hone their observation, creativity, and intellectual skills, while also enjoying an exciting and adventurous week, working side-by-side with forensic experts. Participants will be introduced to the knowledge and skills required to process crime scenes, while learning how science is used to analyze evidence in crime labs. While at camp, the students will:

CSI 2011

- Be introduced to the major sub-disciplines of forensic science including controlled substances, DNA and serology, blood analysis, latent prints, firearms and ballistics, forensic art, trace evidence, polygraphs, and pathology. The student will appreciate that in the real world all these sub-disciplines collaborate to ultimately solve a crime.
- Document and collect evidence from a crime scene, including sketching, photographing, and maintaining proper documentation of the evidence.
- Receive instruction as well as hands-on training on how to process and analyze a wide variety of evidence including fingerprints, impression evidence, trace evidence, blood, controlled substances, and many other types of evidence.
- Under the supervision of forensic experts, students will process a mock crime scene. The students will work in teams to collect the evidence at the scene. All of the evidence from that scene will be processed by the students over the course of the week. Students will work together to recreate the crime scene in order to identify a suspect. Possible suspects will be present throughout the week for the students to interview.
- Present their evidence and analytical results in a final presentation to the parents on the last day of camp.
- Learn about the various opportunities available for careers in forensic science as well as the education required for those careers.

ACADEMIC FOCUS

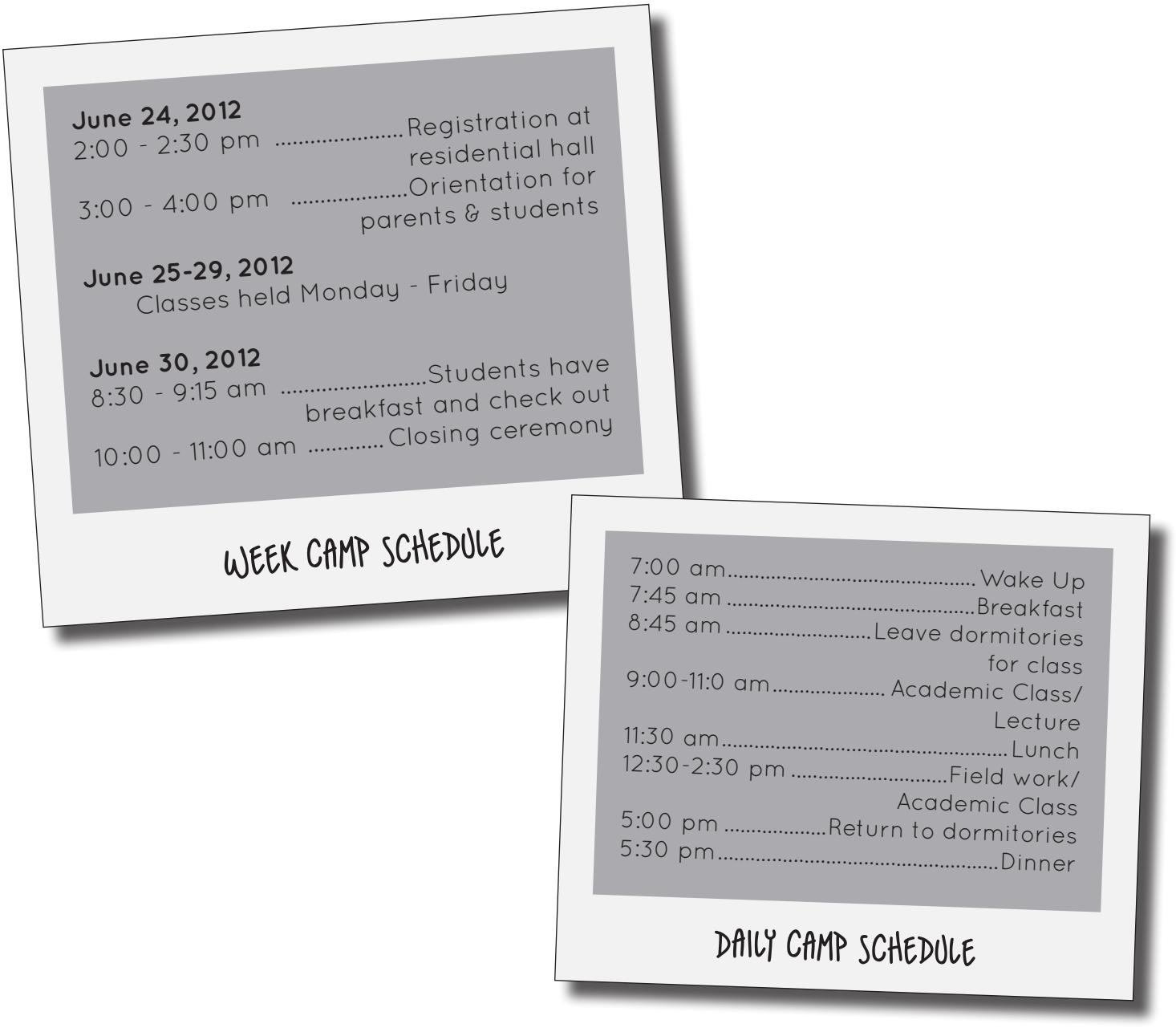
Students will learn how forensic scientists collect evidence from crime scenes, analyze the evidence in the laboratory, draw conclusions from their analysis, and then ultimately present their findings. Students will work in the university laboratories and be assigned a mock crime scene in one of the residence halls. They will use the practical experience that they gain during the week to analyze evidence from their scene. The students will present some of the evidence from their scene during a presentation for the parents on Saturday morning.

Each day, there will be educational presentations given by forensic experts from various disciplines. Hands-on practical exercises will accompany many of the presentations. Students will also learn academic requirements and career pathways for forensics scientists throughout the week by speaking with forensic experts in an informal setting.

Some highlights of previous practical exercises included systematically digging and sifting the dirt for evidence and remains at a mock burial site, a shooting reconstruction using projection rods and a laser light to determine the direction of the shots, dissection of a pig with a forensic pathologist to demonstrate an autopsy, lab analysis of glass, fibers and hair, casting of shoe and tire impressions, blood spatter determination, and fingerprinting.

OUR PROFESSIONAL INSTRUCTOR

We are very fortunate that the professional forensic community values our youth students and future forensic scientists and researchers. Forensic science professors from Michigan State University, professional private forensic lab experts, forensic consultants, researchers and educators and a pathology expert. We also have four to six student assistants that will work with the students each day. The student assistants are Masters and PhD level forensic students from Michigan State University. The MSU Undergraduate Forensics Club also lends their enthusiasm for forensics throughout the week at camp. And to give the students a feel for what real police CSI are like, we have had the fortune of having the Michigan State University Police CSI Unit work with the students on the practical exercises. We have a vast array of expertise and experience to introduce the sub-disciplines of forensic science to the students.



School of Planning, Design and Construction

BOTH ARE ON-LINE COURSE OPTIONS FOR SPRING 2012

IDES 140

Design For Living (3 cr.)

WHAT WILL I LEARN??

This course will focus on design appreciation, exploring such questions as:

- Is design an opportunity to (re)invent?
- What are ways of arriving at an idea for a design?
- What are the universal principles, methods and procedures on which designers rely?
- What defines the interior environment?
- How does the theoretical basis of interior design parallel with architecture?
- How are ideas and significance embedded in design?
- What is the significance of the body and senses for the built environment?
- What does a designer have to consider to be successful?

Class will be On-Line with a FEW on-campus meetings. Dates will be set in early December. Questions? Jeane Boynton, stebleto@msu.edu

PDC 120

Planning & Design Digital Graphics

Dr. Pat Crawford
Assoc. Professor, Landscape Architecture, SPDC
Senior Director, Bailey Scholars Program, CARRS

Questions? Contact me at crawf203@msu.edu

Great for making:

project posters,

professional reports,

research presentations,

and just having fun!

- Introductory course to In-Design, Photoshop, Illustrator, Acrobat and Sketch-up (3D models). Projects include making poster presentations, editing photographs, creating original graphic images, designing PDF report documents and building simple 3D models.
- Includes video tutorials, peer sharing of products, self-paced homework and personalized on-line instructional assistance.
- Emphasis is on learning how to use graphic software, not design skills.
- No software purchases are required.
- Does require a computer you can download trial software onto, web connection and sound.

2 Credits Hours

On-line video office hours

group web conference help sessions

High Achievers

Session I: June 17 - July 12
Session II: July 8 - August 2

High Achievers is a program for academically talented students currently in grades 9, 10, 11, and 12 who are seeking to earn college credit while still in high school. Those enrolled in this program will complete an honors-level college course at MSU in four weeks and earn transferable credit. Students can choose from courses in Biotechnology, Economics and Philosophy. Courses will be taught by top MSU faculty who are widely respected teachers and researchers in their respective fields, and students will use MSU's advanced learning technologies and resources in their coursework. Apply online at gifted.msu.edu by April 6.

ELIGIBILITY

Students wishing to enroll in the High Achievers program must meet the following minimum requirements:

ACT: English 22 and Composite 21, or
SAT: Critical Reading 530 and Total 1040, or
PLAN: English 22 and Composite 21, or
PSAT: Critical Reading or Writing 53 and Total: 104

NOTE: Participation in High Achievers does not guarantee acceptance by the Honors College.

COSTS

For 3-credit courses (subject to change based on MSU tuition rates):

Base tuition cost: $1,707.00

MSU scholarship for 3-credit course: $486.75

Total tuition for 3-credit course for HA students: $1,220.25

Out-of-state students will receive a discounted rate from MSU's out-of-state tuition. 3-credit classes will be discounted from $3,114.75 to a price of $2,287.75 for HA students.

All students are also subject to a non-refundable $70 application fee on top of tuition, to be included when submitting their application. Graduating seniors are considered incoming freshmen and are ineligible to receive the Provost Scholarship. Thus they are responsible for net matriculation and any other university fees.

The deadline for application to High Achievers is April 6, 2012.

COLLOQUIUM

The High Achievers Colloquium is an informational session that provides details about applying, registering, and participating. It gives students and parents a chance to hear directly from the professors about the classes they teach, as well as from former High Achievers students. It is a great opportunity to ask any questions about classes, how to receive credits, and other specific concerns.

The Colloquium will be held on Sunday, January 29, 2012 from 1 - 3:30 pm in 108 Bessey Hall. If you are interested in attending, please contact our office to RSVP:

Email: mcdon288@msu.edu (Kathee McDonald, Program Director)
Phone: (517) 432-2129
Fax: (517) 353-6464

RESIDENTIAL LIVING

While the courses in High Achievers give academically talented students a peek into college classes, the residential option takes this experience one step further. It allows students to get a preview of college life in a more holistic fashion.

Students will experience all that MSU has to offer from the Kresge Art Museum to the MSU Dairy Store. Among other things we attend a show at Abrams Planetarium, tour the MSU Cyclotron, attend a Lansing Lugnuts game, explore the MSU Museum and hang out by the IM West pool during open swim. We go shopping in downtown East Lansing and students get to sample college favorites like Pokey Sticks and Insomnia Cookies. All the while, students are under 24/7 supervision by a Resident Advisor.

Students will reside on the MSU campus in the Red Cedar Neighborhood. These halls are designated to house RCAH students. Students will arrive on campus on Sunday, June 18 to check into their dorm rooms. Classes begin on Monday, June 20. Students will check out of their dorm rooms after classes on Thursday, July 14. The residential program requires at least four students to participate.

Cost: $2,400 for four weeks room and board plus supervision. This cost is applied on top of the tuition cost mentioned in the previous section.

CLASS OFFERINGS

SESSION I:

BIOTECHNOLOGY

Course Code: CSS 491H Sec 301H

Credits: 3

Time: Session I, Monday, Tuesday, Wednesday, Thursday 9:00 AM - 12:00 PM

Instructor: Dr. Mariam Sticklen

Faculty Biography:

- Professor of the College of Agriculture and Natural Resources since 1987
- Advisor to the United States National Academy of Sciences on (1) Bioconfinement of Genetically Engineered Organisms, and (2) Genomics: Genomes To Life (GTL) Program

HIGH ACHIEVERS BIOTECHNOLOGY 2010

- Former member of the Board of Trustees of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) of the Consultative Group on International Agricultural Research (CGIAR) in Washington
- Recipient of the Michigan State University Smuckler International Award
- Inventor of nine U.S. patents
- Editor of two biotechnology books and author of over 150 biotechnology book chapters and journal articles

Course Description:

The course covers the building blocks of life, how genes work, genetic engineering of prokaryotes and eukaryotes, disease diagnosis and disease prevention, production of biofuels and biopharma, and bioremediation. The course also discusses the science behind major human diseases such as HIV/AIDS and cancer, dangers of recombinant biological weapons, interfering with natural evolution, and more. Students will visit a genetic engineering laboratory to observe the actual practice of recombinant DNA technology for production of industrial enzymes and pharmaceuticals.

INTRODUCTION TO MICROECONOMICS

Course Code: EC 201H Sec 301H

Credits: 3

Time: Session I, Monday, Tuesday, Wednesday, Thursday - 9:00 AM - 12:00 PM

Intructor: Dr. Carl Liedholm

Faculty Biography:

- Professor, Dept. of Economics, Michigan State University
- Member of Department of Economics since 1965
- Visiting Fellow (Professor) Yale University, University of Colorado, Wesleyan University (Connecticut), Oxford University (United Kingdom), Sussex University (United Kingdom), University of Amsterdam, University of Nigeria
- Board of Directors, Federal Home Loan Bank of Indianapolis
- Member of Research Advisory Committee, United States Agency for International Development, Department of State, 1987-92; Social Science Research Council, African Doctoral Fellowship Committee, Washington, D.C.
- Author of nine books or monographs and over one hundred articles or papers, with special emphasis on micro and small enterprises in Africa, Asia and Latin America
- MSU Senior Class Council Professor of the Year Award; MSU College of Social Science Outstanding Teaching Award; MSU Broad College of Business Student Senate Outstanding Teaching Award
- Recipient of State of Michigan Teaching Excellence Award, Michigan State University (Amoco Foundation) Excellence in Teaching Award, Withrow Teacher/Scholar Award (MSU College of Business)

Course Description:

This course provides an introduction to the economy from the viewpoint of individuals and businesses and is intended to develop a basic understanding of economic institutions, reasoning and analysis. Microeconomics is essentially the study and practice of making individual choices in a world where people cannot escape the reality of scarcity. In a market economy, these choices are crucially determined by a system of prices for goods as well as resources. Using the tools of economic analysis, the class will consider such issues as: how does the Mars Co. decide how much to charge for M&M candy? Why does the price of Coke increase this week, and then immediately decrease next week? How does Uncle John, owner of Uncle John's apple orchard and cider mill in St. Johns, decide how many apples he should pick this year in order to maximize his profits? Is going to college a good investment? Why does government regulate

local cable TV services? How can you make decisions concerning the optimal allocation of your own time? These and related economics questions will be examined through a variety of readings and extensive in-class discussions. In addition, members of the class will have an opportunity to undertake their own original economic studies, including price surveys in the Lansing area. It is strongly recommended that students have completed math through Algebra II before taking this class.

SESSION II:

INTRODUCTION TO PHILOSOPHY

Course Code: PHL 200H Sec 301H

Credits: 3

Time: Monday, Tuesday, Wednesday, Thursday - 9:00 AM - 12:00 PM

Instructor: Steve Esquith

Faculty Biography:

- Professor, Department of Philosophy, Michigan State University, 1991 - present
- Dean, Residential College in the Arts and Humanities, Michigan State University, 2007 - present
- Senior Fulbright Scholar, Poland 1990-91, Mali 2005-06
- Recipient of MSU Teacher-Scholar Award, 1984
- Author of two books, Intimacy and Spectacle: Liberal Political Theory (1994) and The Responsibilities of Political Bystanders (2009); editor or co-editor of four volumes of essays in ethics and political philosophy; author of 25 refereed articles or chapters in ethics and political philosophy
- Member of the American Philosophical Association, the American Political Science Association, and advisory board of the International Development Ethics Association

Course Description:

Philosophy involves thinking hard about life's fundamental questions – the types of questions that do not fit squarely into any other discipline. What are the limits of our knowledge? Is it possible to know anything with certainty? Can we know what is right or wrong? Does God exist? What exactly is "the mind," and is it something separate from the brain? What does it mean to have free will in a world that tells us that all events must have a cause? How is it possible for a person to undergo the many changes brought on by life and yet remain the same person?

In this course we not only probe these questions ourselves, but also explore how others have raised them in traditional philosophical texts, science fiction stories, and film. Course material will be explored through readings, film, class discussions, and writing assignments. Students will be encouraged to develop and defend their own answers to philosophical questions and critically evaluate the responses others have offered. Requirements include daily reading and discussion questions, two short essays, and a final examination.

Exciting new course offerings! Check out the GATE website for information on *GSAH 200H: Questions, Issues and Debates in Global Studies: Exploring Africa Through the Arts and Humanities* and *REL 205H Myth, Self, and Religion.*

MST@MSU

July 15 - 28

The Mathematics-Science-Technology (MST) program at Michigan State University (MSU) is a two-week summer residential program, July 15-28, for academically talented students who are currently in grades 7, 8, or 9 with a minimum age of 12 years old during the 2011-2012 school year. The program is conducted on the campus of Michigan State University in East Lansing, Michigan and is limited to 110 academically talented students selected from Michigan and across the nation. The program has been designed to stimulate students to learn about new developments in mathematics, science and technology, and to explore related career fields. Apply online at gifted.msu.edu by May 4.

ELIGIBILITY

A student wishing to enroll in the MST program must meet the following minimum requirements:

ACT: Math 21 or Composite 23
SAT: Math or Critical Reading 530 or Combined Total 1010

In addition, student must have:

a positive recommendation from a current teacher of mathematics, science, or technology
demonstrated potential in mathematics, science, or technology

COSTS

The cost of MST@MSU is $1,650 for the two-week program. The cost covers participation in two intensive content-area courses in mathematics, science, engineering, or technology. Each student will also receive instruction in one of the special interest clinics. Other items included in the program fee are:

- Room and board
- Field trips
- Evening activities
- Program T-shirt
- Notebook
- Instructional materials

MST@MST 2011

Program costs do not include transportation to and from Michigan State University. The parent/guardian must arrange for the student to arrive at the University before noon on July 15, 2012 and arrange for the student to leave the campus after the closing program on July 28, 2012 by noon. Lansing's Capital Regional International Airport, located 20 minutes from Michigan State University, provides air transportation services for the mid-Michigan area. Parents are responsible for transportation of their child between campus and the airport. Any transportation, supervision, housing and food costs from students arriving early or leaving late will be charged to the parents/guardians. Program costs do not include personal spending money, and while students are encouraged to bring snacks, there are vending machines available in the dormitory lobby.

Additional Payment Information:

A check or money order of $150 ($70 tuition deposit and $80 application fee) must accompany all applications.
Applications received after May 4th must include a $10 late fee.
The deadline for payment of the tuition balance is June 15th. Contact our office if a payment plan is needed.
Checks should be made payable to Michigan State University or pay by credit card on website.
The application fee of $80 is refunded only if the student is not accepted into the program.
The tuition deposit of $70 is refunded only if: 1) the student cannot attend because of a medical emergency or serious medical problem documented by a doctor; 2) the student cannot attend because of insufficient financial aid; or 3) the student is not accepted into the program.
A request to withdraw must be submitted **in writing** to the Office of Gifted and Talented Education Programs.

RESIDENTIAL LIVING

Although academic study and preparation are the main considerations of MST@MSU, careful attention has been given to providing a safe and pleasant environment that includes opportunities for social, athletic and other extra-curricular activities.

It is important to note that this is a closed program, meaning that students are expected to remain with the program for the full two weeks, not going home for the weekend. Parents cannot take students off-campus during the program.

The program coordinators and resident advisors (RAs), graduates or current MSU students, are responsible for providing a comfortable and friendly atmosphere in the residence hall. The RAs are MSU students who have been selected because they have a commitment to education and because of their ability to interact well with young people. Before the opening of the program, the RAs receive training in regard to rules, regulations, and safety requirements as related to the students' welfare.

During the two weeks (July 15 - July 28, 2012) students will be housed in the Red Cedar Neighborhood on the campus of Michigan State University. Each student will be assigned a roommate, and students cannot choose their own roommates. Students will also be placed in three different instructional groups, allowing many opportunities to establish new friendships and to interact with others in smaller groups.

CLASS OFFERINGS

ASTRONOMY

Astronomy has been one of the most popular offerings at MST for the past several years, and THIS year we are adding several new things which will make this course the most exciting and interesting it has ever been. In a span of just two weeks, students will be taken on a tour of the Universe and investigate:

The scale of the Universe: How BIG is BIG? (Hint: Bigger than you think!)
How Astronomers discover worlds outside our solar system.
How stars are born and die.
Black holes (and just how hard it is to fall into one!)
The history and future of our Universe.
And more!

Students will take advantage of the wide array of resources available through the MSU Department of Physics and Astronomy. At the world-famous Abrams Planetarium, they will identify constellations, examine the movement of the night's sky, and watch an award-winning planetarium show. Resident astronomers will inform the students about the exciting and ground-breaking research performed at MSU.

Students will get a taste of the research life as they visit the SOAR remote observing room and campus observatory. Students will view the 4.2-m SOAR telescope in Chile at work as an MSU astronomer controls it from the observing room in East Lansing. At the campus observatory, the students will be the ones controlling the 24-in telescope and several smaller ones as they observe nebulae, galaxies and other astronomical wonders.

Students will also get a chance to participate in a NASA-sponsored program to design their own Mars mission. They will have to choose science goals that fit within NASA's overall goal of landing people on Mars and design their own spacecraft to carry out these science goals. These designs will be submitted to NASA and may be used in future missions.

This summer promises to be the best and most exciting summer yet in MST Astronomy. We hope to see you there!

-Charles Kuehn, Ph.D. Candidate and Denise Daberko, Okemos

DIGITAL PHOTOGRAPHY AND FILMMAKING

Ever marveled at beautiful, colorful photographs and wondered how the artist captured such beauty? Ever wanted to be involved in the exciting world of movie making? From the world in front of your eyes to the computer and beyond, Digital Photography and Filmmaking will involve hands-on exploration of everything from still images to video. At the end of two weeks, students will have produced both a photo album and a video documenting the two weeks at MST. Concepts shared between stills and video will be discussed and practiced at length, including:

Composition – Rule of Thirds, using lines and planes, depth
Depth-of-field – how to use focus to highlight an aspect of your composition
Motion – choosing to blur or to freeze a subject to bring attention to motion
Tripods – an essential tool for both videography and still photography

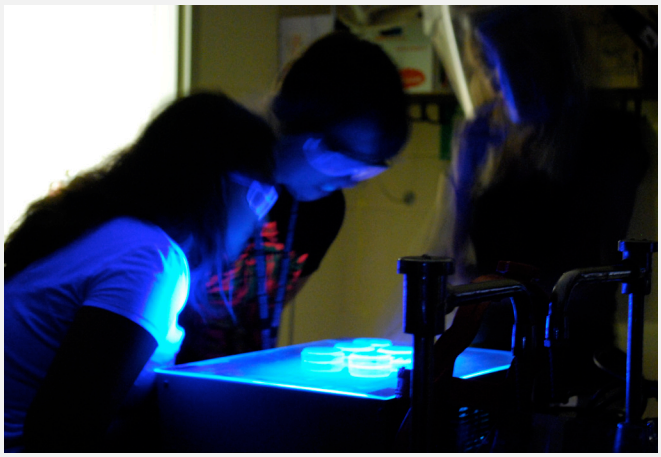
Students will learn all the features of their personal digital cameras and the techniques to capture professional-quality images, get a behind-the-scenes look at a real TV studio, and see and handle professional video equipment. Students will also be introduced to professional computer software, including:

Adobe Photoshop/ Adobe Bridge
Final Cut Pro for video editing
DVD Studio Pro
Motion
Garage Band

In just two weeks, you'll have the knowledge and skills to bring your photos and video to a professional level!

-Peter Johnston and Kate Salvadore, South Lyon

GENETICS AND BIOTECHNOLOGY



GENETICS AND BIOTECH 2011

Can you really determine a killer's identity from a blood sample? Can plants engineered with a firefly gene glow in the dark? Can plants be used for the production of biodegradable plastic and biofuel? How can physicians diagnose genetic disorders in a fetus? Can humans be cloned and how? What are concerns in modern genetics?

Genetics is the scientific study of heredity and hereditary variation. Genetics began in the 1800s as a science designed to study the transmission of heritable traits that control an individual's appearance. Since that time genetic methods and discoveries are catalyzing progress in other biological fields including medicine, veterinary medicine, pharmacology, agriculture, ecology, law, and even behavioral sciences. Modern genetics is also revolutionizing the

military, computer science, biomining, and certain other areas of engineering. In our summer program, we will begin with a study of DNA. DNA stores the information that directs the development and maintenance of every organism. Such biological blueprints are fundamental to life itself. Today scientists routinely manipulate DNA in the laboratory and use it to change the heritable characteristics of living organisms. In this course you will have an opportunity to work with the latest biotechnology equipment available and even manipulate DNA yourself. In addition we will:

Assemble a model of DNA
Extract your own DNA and make a DNA necklace
Discuss DNA fingerprinting by solving a simulated crime scene investigation
Prepare a karyotype
Genetically transform E. coli bacteria with a fluorescent gene from the bioluminescent jellyfish and observe how genetically engineered bacteria glow under UV light just as does the jelly fish.
Discuss and observe Polymerase Chain Reaction technology and the genome sequencing project
Discuss the use of biotechnology in medical, pharmaceutical and veterinary sciences
Separate fragments of DNA using a technique called gel electrophoresis
Tour genetic engineering laboratories and view the operation of Biolistic gun (gene gun) for shooting genes into plant genome for production a biobased industrial material, human anti-HIV vaccine and Interlekan two
Debate concerns in the area of biotechnology

-Dr. Mariam Sticklen and Colleen Palmer, Okemos

MATHEMATICAL EXPLORATIONS

This isn't your grandma's arithmetic! Students will engage in multiple challenging and mind-bending mathematical tasks. As a class, we will discover mathematical puzzles from ancient times, like the Tower of Hanoi, in addition to exploring more modern logic problems that have perplexed even the brightest of minds. Students will explore ground-breaking math throughout the ages, such as the mathematics of the ancient Greeks and Egyptians and why it matters today. We will also explore topics related to the higher-level mathematics done by modern mathematicians such as knot theory, cryptography and fractals. An over-riding theme of the course will be the implications of logical thinking in our day-to-day lives. We will grapple with a variety of logic problems and justify our mathematical discoveries in a myriad of ways.

Students will re-discover how fun math can be when we are not confined to our desks and think outside of the box. Students should come to class with their own particular interests in mind, as we will integrate their passions into our curriculum. Participants should be ready to work in groups, think hard and have fun!

-Alexandria Theakston, Ph.D. Candidate and Heather Bosman, Ph.D. Candidate

ENGINEERING

Have you thought about engineering? Do you know what engineering is? Simply put, it's using math, science and imagination to solve problems, invent and improve things. Engineers figure out new ways to design, create, or improve almost everything around us. They work in teams to design computer games, robots, cars, roads, cell phones, bridges, medical implants, space satellites, and much more.

You might have already acted as an engineer before without even knowing it! If you like math and science, solving problems, thinking creatively or are curious about the world around you and how thing work, you are already on your way to becoming an engineer!

The program is design to give in-depth experiences in engineering majors. In each session students will learn about a major, what engineers do, and spend time with professors in short lectures, interactive demonstrations, hands-on experiments, team-based problem solving, and tours. Students are challenged to use their creativity, to design and build

different devices and to discuss cutting-edge engineering topics including nanotechnology, robotics, digital evolution, bioenergy, etc.

Biosystems Engineers: combine biology and engineering to ensure safe drinking water and food, clean energy sources and a safe environment to live in. In the hand-on design period experiment with biosensors, public health; works with models dealing with ecosystem management, etc.

Chemical Engineers: develop and design products that make use of chemical, physical or biological transformations of raw materials. Lab sessions will include extracting DNA and RNA from strawberries and making batteries, among other things.

Civil Engineers: experts in planning, designing, and assisting in the operation and maintenance of water resources, transportation systems, environmental protection and urban development. Test the strength of different construction materials, such as the breaking point of iron poles, and tour structural engineering facilities.

MECHANICAL ENGINEERING 2011

Computer Science Engineers: design reliable computer systems and create hardware and software for video games, robots, etc. Experience typical computational problems and learn about algorithms and their applications. Create your own interactive stories using Scratch, play with digital evolution software, and more.

Electrical Engineers: design, develop, test electric equipment of motors, aircraft, lightning in buildings, and so much more. Work in teams to build electrical motors, circuits, use computer and engineering labs to measure body organ activity, experiment with wireless communications, etc.

Environmental Engineers: work to find solutions for problems such as air and water pollution, global warming, and animal endangerment. Experience design solutions to mitigate adverse human impacts on the environment.

Materials Science Engineers: tailor raw materials from the Earth, to create products that we use every day like computers, dishes, and athletic equipment. Learn about superconductors, levitation, experiment with aerogel insulation, regeneration of nervous tissue, and much more.

Mechanical Engineers: invent everything from combustion engines to spacecraft and power systems, to artificial limbs. Learn how natural resources and physical situations turned into usable energy; design and test trebuchets, work with models of wind turbine generators, etc.

Spartan Vex Robotics: Learn to build and program robots! Students work in groups to program their robots to be controlled remotely. Teams learn to adjust their programs based upon program inputs and actual output.

-Luis Donado, M.Sc.

NUCLEAR ASTROPHYSICS

What do the history of the universe, the life and death of stars, and the elements that make up your body have in common? Nuclear astrophysics! Nuclear reactions such as fusion, fragmentation, and radioactive decay have guided the chemical evolution of the universe and the energy cycle in stars.

This course, sponsored by the Joint Institute for Nuclear Astrophysics (JINA) and MSU's world-class National Superconducting Cyclotron Laboratory (NSCL), will introduce you to the world of nuclei in deep space. Topics include:

A tour of NSCL's rare isotope research areas
Spectral analysis and classification of stars
Fusion in the stellar furnace
When stars blow up: Supernovae

Nucleosynthesis (the construction of new elements)
The mysterious origin of Ultra-High-Energy Cosmic Rays
Cosmic Ray experiments with portable detectors
Cutting-edge research at JINA institutions (MSU, Notre Dame, and U of Chicago)

-Zach Constan, Ph.D. and NSCL Outreach Coordinator and Jennifer Beck, Perry

PHYSICS

What do rockets, radios, and radiation have in common? They can all be better understood with physics! Our everyday experience includes a bewildering number of gadgets and natural phenomena. Physics provides us with a clear and delightful understanding of many of these phenomena, while in some cases raising intriguing questions about still-mysterious facets of nature. In this course, students will study four areas of physics:

Mechanics (energy and forces)
Waves (sound and light)
Electricity and magnetism
Nuclear physics

While learning about these topics, students will have the opportunity to observe and participate in numerous interesting and mind-boggling demonstrations from the extensive stock of lecture demos used in MSU Physics classes. In the lab, students will use high-tech equipment to complete experiments such as measuring the acceleration due to gravity and determining the diameter of a hair using a laser.

-Dr. Jon Pumplin and Mark Lathrop, M.S., Everett

PHYSIOLOGY 2011

PHYSIOLOGY

Physiology is the amazing branch of science that teaches us how people, animals and other small creatures live, adapt and thrive! Physiology is the study of life and how living things work. Every day this branch of science is used to solve problems... for the forensic scientist, the nurse, the doctor, the veterinarian, the researcher and the student.

In MST Physiology, everyone is a scientist and has the opportunity to find out why our hearts race, how we breathe, how our muscles work and grow and even how we can use physiology both in crime solving and disease fighting. Students will use advanced technology in the Physiology Laboratory, Exercise Laboratory and the Radiology Department to learn more about physiology. This is a great class for students interested in health professions. Your MST Physiology experience includes:

Measuring the electrical activity of your heart
Measuring your lung function
Testing your nervous system
Testing your muscle function
Imaging you brain with MRI (optional)
Solving forensics cases
Measuring respiration rates of crickets

-Jill Slade, Ph.D. and Lori Kindsvatter, Pewamo-Westphalia

PUBLIC HEALTH

Have you ever wondered where the water goes when you flush the toilet? How does the flu spread so quickly through your school? What does global warming have to do with health? What do you think would happen to you and your family if a natural disaster like Hurricane Katrina hit the Midwest? The answers to these questions all have one thing in common - public health!

Public health is an exciting and growing field of study. It challenges us to cope with complex health problems, such as controlling infectious diseases, like the flu and HIV/AIDS; reducing environmental hazards including mercury in fish; violence, such as date rape; and substance abuse. While medicine looks at treating individuals, public health focuses on improving health, preventing diseases and looking at the overall health of the community and the world.

Public health is geared toward serving others. Public health professionals are leaders who meet the many exciting challenges in protecting the public's health all over the world, today and in the future. During this course, we will explore a range of exciting public health topics, working in groups on interactive projects and taking field trips to various community health sites. This is a great class for students interested in health professions. We will visit and explore:

The East Lansing water and sewage treatment plant
A local restaurant with a sanitarian to discuss food outbreaks and control
The Ingham Count Health Department
Global public health from an African perspective
Outbreak investigation
How to become a public health professional
And much more!

Join us for a dynamic two-week experience in the exciting field of public health!

-Cheryl Goodman, MPH, MSW and Connie Currier, MPH, DrPH

CLINIC OFFERINGS

BASKETBALL CLINIC

Instructor: Matthew Murray

Basketball is a team game that is great for fitness and a lot of fun! In the basketball special clinic, we will play a lot of games while improving our basketball skills. You will also learn the importance of fundamentals, offense, defense, and how to work together as a team. Of course, we will have plenty of fun scrimmaging in preparation for our annual game with the MST faculty and staff. See you on the court!

CREATIVE WRITING CLINIC

Instructor: Kristi Vartanian

This will be a fun, upbeat clinic focusing on the creative and expressive elements of writing. Students will write each day and share their work with their peers with an emphasis on positive expression and encouragement. Daily exercises will vary and may include: a descriptive piece, a humorous narrative or critique, writing for mystery, etc. Each student will complete a short story as the final project of the clinic. Students are encouraged to bring pencils, paper, a folder of their work, a creative spirit and a sense of humor to class.

FLASH I: MOTION GRAPHICS AND ANIMATION

Instructor: Jiatyan Chen

Do you like cartoons, music videos, or anime? Using the same techniques as famous animators, you will learn just how easy it is to bring your imagination to life using Flash. If you can dream it, you can create it. So put your creative helmets, hands on the controls, and prepare for a flight to a world where your imaginations never ends.

FLASH II: INTERACTION AND GAMES

Instructor: TBA

In this class, we take animation to the next level by giving control to the user. Adobe Flash is a tool that we can use to build animations, games and applications that can be viewed on the web. We will start with motion design and quickly move on to building controls to interact with our creations. We will be learning how we can use ActionScript, Flash's programming language, to accomplish this. Whether you are into art & animation or math & programming, this class will challenge and engage you.

BASKETBALL 2011

VISUAL ARTS CLINIC

Instructor: Heidi Irvine

Visual Arts students will get to work with a variety of projects and mediums. The group will begin with a ceramic project to be fired and taken home by the end of camp. Other projects will include 3-D materials such as melted glass as well as 2-D projects such as pencil, ink, print making, or painting. We take advantage of the great MSU facilities and create some beautiful works of art. This class can be enjoyed by any level of art student and will help build basic skills and improve on the talents already possessed. This class is a lot of fun!

SOCCER CLINIC

Instructor: Andrew Floyd

Come take part in the world's most popular sport! This clinic will cover soccer basics such as passing, dribbling, and shooting. We will focus both on improving individual technical ability and learning team tactics. Friendly competition and games will make for a great time for everyone. Whether a beginner or an expert, this clinic has something to offer players of all ability levels.

July 15 ..... Registration & Orientation
July 16-27 ..... Classes from 9:00 am - 4:15 pm on Monday-Friday
July 21 ..... Field Games & Color Group Challenges
July 27 ..... Rap Battle
July 28 ..... Check Out & Closing Ceremony

TWO-WEEK CAMP SCHEDULE

7:00 am ..... Wake Up
7:45 am ..... Breakfast
9:00-11:00 am ..... Morning Class
11:30 am ..... Lunch
12:30-2:30 pm ..... Afternoon Class
3:00-4:15 pm ..... Clinic
5:30 pm ..... Dinner
6:30-9:30 pm ..... Study Period or Planned Group Activity
10:00 pm ..... Room Checks
10:30 pm ..... Lights Out

DAILY CAMP SCHEDULE

Ingham ISD

School Development Services' Office of Talent Development provides a continuum of services to local school districts, non-public school and Public School Academies by: supporting our local constituents in identifying students and instructors needs, supporting the development of strategies to meet the learners' needs, curricular enrichment, flexible pacing in the regular classroom, more specialized options for learners, advocating for proactive responses to the needs of diverse learners in the regular classroom through differentiated instruction.

MASCOT

(Mathematics Augmentation Series: Cultivating Optimum Teaching) designed to serve students who have been identified as having potential for learning advanced mathematics but lack some of the skills necessary for total success. This program model allows for development in the content area of mathematics, as well as, for better self-understanding through the use of specific guidance strategies and techniques.

Grade 6

June 25 - July 13, 2012

Cost: $250

Kids' College

A two-week learning experience for students who are identified in grade 4 and 5 as having outstanding talent or unusual interest in science.

Grades 4-5

July 9 - 20, 2012

Cost: $280

Dimensions

A two-week non-residential program designed to give high ability seventh and eighth grade students an opportunity to study in a university setting with peers who have been identified as having similar abilities. Students will participate in two academic classes and one special area class.

Grades 6, 7 and 8

June 18 - 29, 2012

Cost: $375

Girls Math/Science and Technology Conference

A half day conference designed to stimulate the participant's interest in mathematics, science and technology; to broaden their awareness of career options; to motivate girls to elect higher-level math and science courses in high school and college; to provide female role models and possible mentors.

TBA February 2012

Grade 6

East Lansing High School

Cost: $30

Travel Programs

SHIGA STUDENTS, 2008

"I feel that my child's experience in GATE programs was stimulating to him because of the intellectual interactions he had. The overall quality of the program was excellent."

Every day we hear how the process of globalization is affecting the world. These programs allow high school students to actively engage in the world community, become better students and more informed citizens. Traveling abroad offers the advantage of experiencing a new culture in addition to learning about these new worlds. These experiences give students a whole new perspective on life and learning that stays with them forever.

SHIGA STUDENT EXCHANGE

"Experience another culture to the fullest extent while making life-long friendships in our Japanese exchange program."

Grades: 9-11
2012 Program Dates
MI to Japan: June 20 - July 5
Japan to MI: September 6 - 23

CHINA ADVENTURE

"Deepen your understanding of the language, culture and history of the world's fastest growing economy on an adventure across China."

Grades: 10-12
2012 Program Dates
Residential: July 29 - August 1
Travel: August 2 - August 17

Shiga Student Exchange

MI to Japan: June 20-July 5
Japan to MI: September 6-23

The Michigan Department of Education and the Shiga Board of Education initiated the Michigan-Shiga Student Exchange Program in 1990. The goal of the program was to expand the relationship between the two "sister" states, Michigan and Shiga Prefecture in Japan, which had been established in 1968. GATE programs have been administering the program on behalf of the State of Michigan since 1993. As an exchange program created specifically for high school students, it aims to create ties of friendship, education and understanding between the two states.

APPLICATION CONSIDERATIONS

- Applications are due February 3, 2012, apply online at gifted.msu.edu.
- The cost per student is $1500, to be paid in advance, however NO money should be sent with this application. This fee does not include airfare. There are new entry safety procedures upon entering Japan, these can be viewed at http://travel.state.gov/travel/cis_pa_tw/cis/cis_1148.html.
- Airfare to and from Japan will be covered by the applicant; flight information will be provided.
- Selected students and parents must attend a spring orientation meeting, held at Michigan State University on March 11 & 12. This $125 orientation fee is in addition to the costs mentioned above.
- Michigan students will depart from and return to Detroit Metro Airport in Detroit.
- Families of selected students must host a Japanese student for two weeks in September. Michigan families must arrange to both meet their Japanese students and attend the Farewell Reception in Lansing.
- The high school attended by the Michigan student must be willing to welcome a Japanese student to its classes for two weeks in September.
- Previous study of Japanese language on the part of the applicant is helpful, but not necessary.

SHIGA, JAPAN 2010

PROGRAM DEATILS

- Fifteen high school students, grades 9 to 11, are chosen to represent the state of Michigan.
- Fifteen Shiga high school students are selected and paired with the Michigan students, based on similar interests.
- During the summer the Michigan students visit Shiga, Japan for two weeks from June 20 through July 5. Each stays with a Japanese student and family, attends school and participates in daily life.

- The Japanese students travel to Michigan for two weeks from September 6 through September 23. Each stays with the family of the Michigan student who stayed with him/her during the summer and attends school with that student.
- Applicants should be open-minded, flexible, willing to accept new challenges and ready for rewarding experiences.
- This is truly a self-led learning experience where you will create your own experience!

TRAVEL CONSIDERATIONS

Passport Information

Students should apply for their passport when completing their application. Due to the changes in the US laws, the processing time for passports has greatly increased. Passport forms are available at most post offices and can also be downloaded from the internet. If you already have a passport, make sure it is valid until at least six months after your return date.

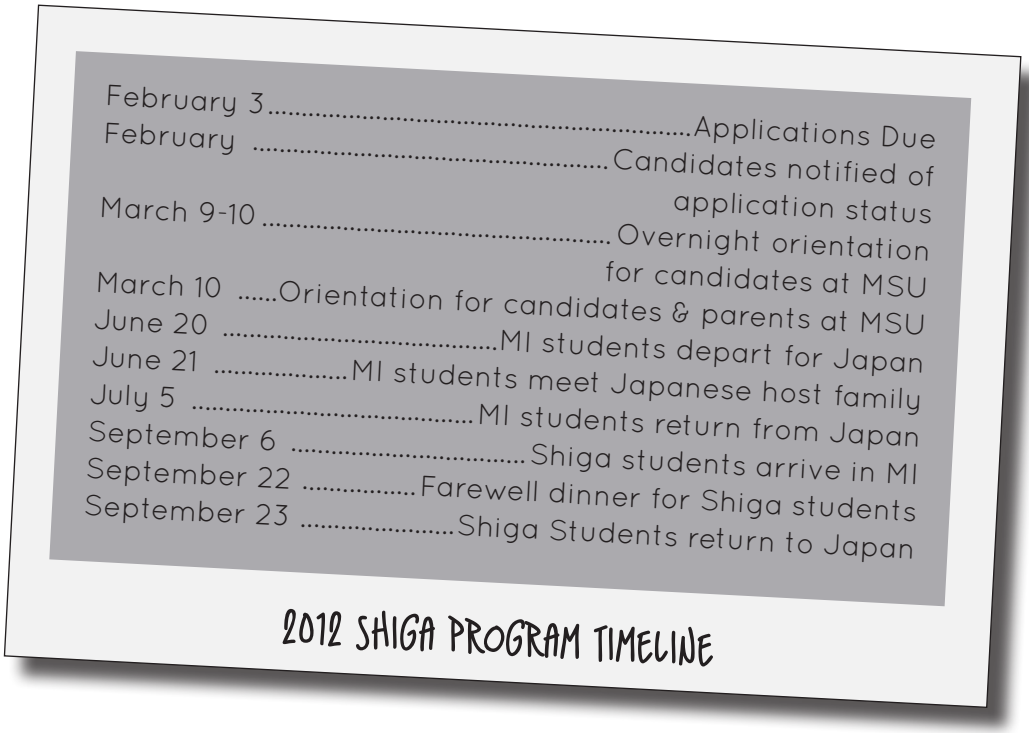
In order for any student to travel, they must have their passport information submitted to our office 48 hours prior to the orientation.

Spring Orientation

Selected students attend an extensive orientation session to prepare them for the cultural changes they will experience while abroad. This orientation session, held in March, will include lessons in Japanese culture, culture shock, team-building, and lessons in advanced or beginning Japanese. At the conclusion of the orientation, the Michigan-Shiga Student Exchange Committee selects the 15 participants who will travel to Japan.

Student Supervision Abroad

Two chaperones will be selected from a pool of well-qualified high school teachers from Michigan to supervise the students' activities while they are abroad. The chaperones will spend the two weeks traveling to different high schools around Shiga, visiting with Japanese educators, and checking in with Michigan students. Chaperones are also always available by cell phone for students in case of an emergency. The role of the chaperone is designed to allow the students the highest degree of freedom and independence in their experience while lending support and assistance in their time abroad.



China Adventure

TBA

This program is designed to provide a three-week enrichment experience for high school students in contemporary Chinese language and culture. Students admitted into the program will spend one week living on the MSU campus taking intensive courses in Chinese language, history, and contemporary culture. At the end of the week, students depart for a 14-day journey in China. Cities to be visited include Beijing, Jinan, Xi'an, Suzhou, Chengdu, and Shanghai, China. Applicants for this program should be open-minded, willing to accept new challenges, and have an interest in Chinese culture.

During the residential portion of the program on the MSU campus, students will be located in the Snyder-Phillips/Mason-Abbot dormitory complex. This complex features newly renovated rooms and a state-of-the-art dining facility. Classes on campus and travel in China are led by faculty from MSU's Asian Studies Center and the Visiting International Professional Program (VIPP). Apply online at gifted.msu.edu before March 16.

ELIGIBILITY

To be eligible for the China Adventure program, students must:

- Be in Grades 10, 11, or 12
- Be open to new experiences in a culturally unfamiliar environment
- Have a desire to work in an academically challenging environment

Additionally, students must have the following:

- Two recommendations: one from an educator, one from an adult (non-relative)
- A student essay
- GPA of 3.5 or above
- Documentation of strong standardized test scores (PLAN, PSAT, ACT OR SAT)
- Current transcript

CHINA ADVENTURE

COSTS

The program fee includes the following:

- Non-refundable application fee
- Deposit
- Pre-departure orientation
- Food and housing on MSU campus
- Course materials and supplies
- Risk insurance and international health insurance
- T-shirt
- Transportation to the airport
- Hotels, sightseeing, most meals, transportation, etc. while in China

The program fee does not include:

Airfare to China and any additional airfare
Some meals in China
Personal spending money
Travel insurance

NOTE: Program costs do not include transportation to and from Michigan State University. Parents/guardians must arrange for the student to arrive at the campus for check-in and they must also arrange for the student to leave the campus after the conclusion of the program. Lansing's Capital City Airport, located 20 minutes from Michigan State University, provides air transportation services for the mid-Michigan area. Parents are responsible for transportation of their child between campus and the airport. Any transportation, supervision, housing and food costs from students arriving early or leaving late will be charged to the parents/guardians. Program costs do not include personal spending money, and while students are encouraged to bring snacks, there are vending machines available in the dormitory lobby. **Check the GATE website for updates and more details!**

FEES & POLICY

- A check or money order must accompany the China Adventure application and copies of the applicant's passport and visa.
- Airfare to and from China will be covered by the applicant; flight information will be provided.
- All checks or money orders should be made payable to Michigan State University or pay by credit card online at http://www.gifted.msu.edu/program-payments/
- Refunds are processed in 6-8 weeks.
- Travel Insurance: If the student purchases travel insurance, they would be able to recoup 100% of their investment, less the insurance premium and the agency travel penalty in the event that they cancelled due to illness or injury of anyone in their immediate family that would keep them from travelling. Therefore it is strongly recommended that parents purchase travel insurance. This should be purchased at the same time when purchasing the airline ticket. Purchasing a policy with trip cancellation will provide air ticket protection in the event the student has a change of plans. Websites such as www.travelguard.com can assist parents with travel insurance questions and policy cost.

TRAVEL CONSIDERATIONS

Passport/Visa Information

Students will be required to obtain a passport and visa for participation in this program. U.S. and non-U.S. citizens need a valid passport both to enter other countries and to return to the United States. If you already have a passport, make sure it is valid until at least six months after your return date. If you must apply for or renew a passport, do it immediately. Due to recent changes in US laws, passport application processing takes 3 months or more. Passport forms are available at many federal and state courts, probate courts, some county/municipal offices and some post offices. They can also be downloaded from the Internet. A visa is official permission granted by the authorities of a country where you will study or travel that allows you to enter and remain in that country for a specific purpose. The visa itself is frequently a stamp in your passport, not a separate document. You will need a passport before applying for a visa and the passport plus visa process may take several months, so start early.

Immunizations

Students participating in this program are strongly encouraged to receive a series of immunizations specific for travel within Asia. Students should schedule an appointment to be seen at a travel clinic at least 4-8 weeks before the program to inquire about the recommended and/or required vaccines you may want to consider before departure.

CURRICULUM

This program will introduce students to the exciting field of Chinese studies. Each day will begin with a three-hour class on history and contemporary culture of China. Topics covered include the physical and cultural geography of China; an overview of Chinese historical themes; creation of a unified China; Confucianism and the Confucian state; introduction of Buddhism and the creation of the Daoist religion; poetry and literature; the Silk Road; international trades and the dispersion of ideas, religions and inventions; the coming of the West and its challenges; the rocky road to revolution and the establishment of the Peoples' Republic of China (PRC); understanding contemporary China through literature, music, politics, and economics. Each afternoon will begin with a two hour Chinese language class based on the first year textbook and taught by a MSU language instructor.

During the travel portion of the course, students will have lectures with site visits in Beijing, Jinan, Xi'an, Suzhou, Chengdu, and Shanghai. Projected sites to be visited in Beijing include: the Imperial Palace, Tian An Men Square, Beihai park, a local school and a Peking Duck Dinner; Badaling and The Great Wall and the Ming tomb; the Lama Temple, a Confucian Temple, Bell Tower, and Riksha tour of Hutongs, and visit a local family's home. Begin Day 5 with travel from Beijing to Jinan, where students will visit an acupuncture clinic and visit the city's natural fountains. Enjoy a guided tour of Qufu and Jinan and then leave for Xi'an in the evening. On Day 7, students will visit the Terracotta Warriors Museum and the next day they will visit the Shaanxi Historical Museum. On this day, students will also receive a tour of Xi'an and then depart for Chengdu in the evening.

On Day 9, there will be a visit to the Chengdu Panda Research Center and in the evening the students will have an opportunity to meet host families in Chengdu. As well as meeting host families, the students will spend the night in Chengdu and visit a high school the following day. On Day 11, students will depart Chengdu for Shanghai, once they have arrived in Shanghai they will participate in a guided tour of the city in the afternoon and will also have a Bund tour in the evening. On Day 12, students will travel to Tongli and Zhouzhuang and then arrive in Suzhou for the night.On the following day, students will visit The Lion Grove Garden, The Cold Mountain Temple, and The Humble Administrator's Garden in Suzhou. They will once again return to Shanghai that evening. On Day 14, the students will tour God Temple, have some time for their own choice of activity, and make the flight back to USA from the Shanghai Pudong airport. Since one requirement of the program is to keep a journal, students will be given questions to answer in the journal about each site we visit. In addition, students will continue with Chinese language study with a focus on practical topics they can use when touring sites and meeting the local residents.

W. B. & Candace Thoman Foundation

Ingham Intermediate School District

Michigan State University Honors College

Michigan State University

Department of Mathematics

Department of English

Michigan State University Office of the Provost

DART Foundation

THRUN Law Firm, P.C.

GIFTED & TALENTED EDUCATION PROGRAMS MADE POSSIBLE IN PART THANKS TO:

2012-2013 Important Dates

High Achievers Colloquium
Sunday, January 29, 2012
1:00 - 3:30 PM
B108 Bessey Hall

CHAMP Informational Meeting
Thursday, March 15, 2012
6:00 - 7:00 PM
B108 Bessey Hall

ISHALL Informational Meeting
Thursday, March 15, 2012
7:00 - 8:00 PM
B108 Bessey Hall

MCHAMP Informational Meeting
Tuesday, March 20, 2012
6:00 - 7:00 pm
Memphis Jr. High School

LEAF Informational Meeting
Thursday, March 22, 2012
6:30 - 7:30 pm
B108 Bessey Hall

NEWCHAMP Informational Meeting
Wednesday, March 28, 2012
6:00 - 7:00 pm
Newaygo County RESA

ISHALL Diagnostic Testing
Sunday, April 15, 2012
2:00 - 3:00 PM
C103 Wells Hall
OR
Saturday, April 21, 2012
10:00 - 11:00 AM
C103 Wells Hall

HATS Off (Invitation Only)
Saturday, May 19, 2012
10:00 AM - 12:00 noon

CSI Forensic Science Program
June 24 - 30, 2012

High Achievers Program
Session I: June 17 - July 12, 2012
Session II: July 8 - August 2, 2012

Michigan/Shiga Student Exchange Program
June 20 - July 5, 2012 (MI to Japan)
September 6 - 23, 2012 (Japan to MI)

MST @ MSU
July 15 - 28, 2012

China Adventure
July 29 - August 1, 2012 (residential)
August 2 - 17, 2012 (travel)

NOTES

NOTES

LEAF 2011-2012
NEW FOREIGN LANGUAGE PROGRAM

CSI 2011

MST 2011

NEWCHAMP 2011-2012
NEWEST CHAMP PROGRAM!

Academic Integrity

ALL-UNIVERSITY POLICY: INTEGRITY OF SCHOLARSHIP AND GRADES

The following statement of University policy was approved by the Academic Council and the Academic Senate, and serves as the definitive statement of principle and procedure to be used in instances of academic dishonesty.

The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The University expects that both faculty and students will honor these principles and in so doing protect the validity of University grades. This means that all academic work will be done by the student to whom it is assigned, without unauthorized aid of any kind. (See General Student Regulation 1.00, Scholarship and Grades, for specific regulations.) Instructors, for their part, will exercise care in the planning and supervision of academic work, so that honest effort will be positively encouraged.

If any instance of academic dishonesty is discovered by an instructor, it is his or her responsibility to take appropriate action. Depending on his or her judgment of the particular case, he or she may give a failing grade to the student on the assignment or for the course.

In instances where a failing grade in a course is given only for academic dishonesty, the instructor will notify the student's academic dean in writing of the circumstances.

The student who receives a failing grade based on a charge of academic dishonesty may appeal a judgment made by a department, school, or a college. Refer to Academic Freedom for Students at Michigan State University.

When in the judgment of the academic dean, action other than, or in addition to, a failing grade is warranted, the dean will refer the case to the college-level hearing board, which shall have original jurisdiction. In cases of ambiguous jurisdiction, the appropriate judiciary will be randomly selected by the Assistant Provost from one of the three core colleges. Appeals from the judgment may be made to the All-University Academic Integrity Review Board. Refer to Academic Freedom for Students at Michigan State University.

In instances of academic dishonesty where the instructor feels that action other than, or in addition to, a failing grade in the course is warranted, the instructor will report the case to his or her departmental or school chairperson and to the student's academic dean. The dean will then refer the case to the college-level hearing board, which shall have original jurisdiction. Refer to Academic Freedom for Students at Michigan State University.

Gifted and Talented Education
186 Bessey Hall
Michigan State University
East Lansing, MI 48824

Non-Profit Org.
US Postage
PAID
East Lansing, MI
Permit No. 21

For more information on any of our programs, please visit

http://www.gifted.msu.edu

Michigan State University is an affirmative-action, equal-opportunity employer.