High Achievers
Summer 2008
June 17 – July 17

A program for students who are currently in Grade 9, 10, 11 or 12

During the summer of 2008, the following five honors-level university courses will be offered:

**Introduction to Microeconomics**
(EC 201 Section 301H)
An introduction to the economy from the viewpoint of individuals and businesses

**Introduction to Psychology (PSY 101 Section 301H)**
Focus on understanding what psychology is all about and how psychologists go about the business of studying human behavior

**Introduction to Philosophy (PHL 200H)**
The study of major philosophical questions through readings, discussions, films and short papers

**Introduction to Film (ENG 230H)**
Focus on understanding how films are made, how they work as art, and how they function as persuasive documents

**Biotechnology (CSS 491H)**
An introduction to biotechnology-related branches of science, including molecular biology, genetics, and immunology

The courses are designed for high achieving students who are in grades nine, ten, eleven or twelve and meet the eligibility criteria listed inside.

This program is partially funded by the W.B. and Candace Thoman Foundation and the Office of the Provost at Michigan State University
I. INTRODUCTION TO MICROECONOMICS (EC 201.301H); 3 credit hours
Tuesday, Wednesday and Thursday, 9:00 a.m. - 12:00 Noon on the MSU Campus

Instructor: Dr. Carl Liedholm, 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
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)

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 2 before taking this class.

II. BIOTECHNOLOGY (CSS 491H); 3 credit hours
Tuesday, Wednesday, and Thursday, 9:00 a.m. - 12:00 Noon

Instructor: Dr. Mariam Sticklen, Professor of the College of Agriculture and Natural Resources since 1987
Advisor to the United States National Academy of Sciences on (1) Bio confinement of Genetically Engineered Organisms, and (2) Genomics: Genomes To Life (GTL) Program
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 DC
Recipient of the Michigan State University Smuckler International Award
Inventor of seven U.S. patents
Editor of two biotechnology books and author of over 150 biotechnology book chapters and journal articles

This course provides an introduction to biotechnology-related branches of science, including basic molecular biology, genetics, recombinant DNA and immunology. 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, and concerns about the business of biotechnology in developed versus developing countries, dangers of recombinant biological weapons, interfering with the 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.
II. INTRODUCTION TO PSYCHOLOGY (PSY 101H); 4 credit hours
Tuesday, Wednesday and Thursday, 9:00 a.m., 12:40 p.m. on the MSU Campus + additional hours through the Internet

Instructor: Dr. Linda A. Jackson, Professor, Dept. of Psychology, Michigan State University
Member of Department of Psychology since 1981
Recipient of Michigan State University Teacher-Scholar Award, 1986
Author of “Physical Appearance and Gender: Sociocultural and Sociobiological Perspectives” (1992); and “What Students Really Think of Professors” (1997).
Member of American Psychological Association, American Psychological Society, Association for the Advancement of Computers in Education, Association of Computing Machinery, Society for Experimental Social Psychology

The course will focus on developing an understanding of what psychology is all about and how psychologists go about the business of studying human behavior. We will examine a diverse set of topics, including the nervous system (e.g., how does the chemistry of the brain influence mood and behavior?); intelligence (e.g., can we become more intelligent? Why or why not?); memory (e.g., why do we remember emotionally-charged events better than emotionally-neutral ones?); attitudes (e.g., are people innately prejudiced?); cognitive development (e.g., what do infants know and how do we know they know?); and mental disorders (e.g., what causes depression and what can be done about it?). Classroom and outside-of-class activities will emphasize student participation in the form of discussion and use of the World Wide Web to present psychological concepts and research. Course grades will be determined by mastery of course content, with emphasis on understanding core concepts and issues in psychology.

IV. INTRODUCTION TO PHILOSOPHY (PHL 200H); 3 credit hours
Tuesday, Wednesday and Thursday, 9:00 a.m. - 12:00 Noon

Instructor: Dr. Scot Yoder, Assistant Professor and Assistant to the Dean, Residential College in the Arts and Humanities, Michigan State University
Assistant to the Dean, Residential College in the Arts and Humanities since 2006
Member of Department of Philosophy since 2001
Faculty at Seton Hall University 199-2001
Author of articles on bioethics, pragmatism, and practical philosophy

Philosophy involves thinking hard about life’s fundamental questions – the type 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? Could a computer think? 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.

V. Introduction to Film (ENG 230H); 4 credit hours
Tuesday, Wednesday and Thursday, 9:00 a.m. - 12:00 Noon

Instructor: Judith Roof, Professor of English, Dept. of English, Michigan State University
Author of five books including “All About Thelma and Eve: Sidekicks and Third Wheels”
Author of two textbooks
Author of more than fifty essays on film, drama, gender, and critical theory
Visiting Professor, University of Amsterdam, 1992
MSU Distinguished Professor, 2005

The most powerful medium today, film, is art and argument, text and performance. How is it that film can be so entertaining yet so persuasive? How can it be so realistic and yet so artificial? How and why does it take so many different forms from “blockbuster” to documentary, from commercial to experimental film? How does film employ technologies to produce its illusions? When we watch a film, what exactly are we watching? In this course, we will explore how films are made, how they work as art, and how they function as persuasive documents. We will learn the language of cinema and the language of film criticism. We will watch films drawn primarily from classical Hollywood tradition and make short films ourselves. Films to be studied include “Citizen Kane,” “The General,” “Singing in the Rain,” “His Girl Friday,” “Rear Window,” “Blow Up,” “American Graffiti,” and “Memento.”
High Achievers Application

ELIGIBILITY CRITERIA

Up to twenty-five students will be enrolled in each course. To be eligible, a student must:

1. Have completed grade nine, ten, eleven or twelve by June 13, 2008.

2. Have achieved high scores on one of the following tests:

   SAT I Reasoning Test minimum scores:
   Critical Reading  530
       AND
   Total  1040

   ACT minimum scores:
   English  22
       AND
   Composite  21

   PSAT minimum scores:
   Critical Reading 53
       OR
   Writing Skills 53
       AND
   Critical Reading and Writing Skills Total 106

   PLAN minimum scores:
   English  22
       AND
   Composite  21

3. Have earned at least a 3.5 cumulative grade point average in a college preparatory curriculum. A copy of the student’s transcript, including grades for the first semester of the 2007/08 school year must be included with the completed application.

4. Have a high degree of motivation and are willing to put forth the effort necessary for an honors-level college course.
The completed application package has several parts. Please do each of the following:

1. Fill out the MSU High Achieving High School Student application (Section 1). Make sure that your principal or counselor signs the bottom of the application. Please note: A student may enroll for only one course - Introduction to Psychology (PSY 101H); Introduction to Philosophy (PHL 200H); Introduction to Microeconomics (EC 201H); Biotechnology (CSS 491H); or Introduction to Film (ENG 230H).

2. Complete the High Achievers application (Section 2).

3. Write a short paragraph (Section 3).

4. If you are applying for financial assistance, complete the GATE Request for Financial Assistance Form and include requested documentation of need in the package.

5. Include a copy of your high school transcript, including fall semester 2007.


7. Include a $60.00 check or money order made payable to Michigan State University for the application fee.

By March 31, 2008 mail or bring the completed application package to:

**OFFICE OF GIFTED AND TALENTED EDUCATION**
186 BESSEY HALL
MICHIGAN STATE UNIVERSITY
EAST LANSING, MI 48824-1033

If you have questions or concerns, please call
The Office of Gifted and Talented Education at Michigan State University at 517.432.2129,
or email Kathee McDonald at mcdon288@msu.edu,
or visit us on the web at www.msu.edu/user/gifted

This program is partially funded by grants from the Office of the Provost, Michigan State University, and the W.B. and Candace Thoman Foundation.
**APPLICATION FOR ADMISSION**

**HIGH ACHIEVING HIGH SCHOOL STUDENT**

An official high school transcript must accompany this application.

**TO BE COMPLETED BY APPLICANT (Use Typewriter or Print Legibly)**

<table>
<thead>
<tr>
<th>Last Name, First Name, Middle Initial (Leave Space Between Each Name)</th>
<th>Sex</th>
<th>Social Security Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year and Semester You Wish to Enroll</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
<th>2008</th>
</tr>
</thead>
</table>

|---------------------|---------------------------------|--------------------------------------|-------------------------|------------|---------------------------------|----------------------------------|

<table>
<thead>
<tr>
<th>Record appropriate number in box</th>
<th>Tribal Affiliation</th>
</tr>
</thead>
</table>

**NOTE:** If you are multiracial, please complete the above item by indicating the ethnic/racial group you identify with most or the ethnic/racial group to which you are usually regarded in the community as belonging.

<table>
<thead>
<tr>
<th>Are you multiracial?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If you answer “yes,” please check the categories that correspond to the races of your parents.

<table>
<thead>
<tr>
<th>( ) White/Caucasian Non-Hispanic</th>
<th>( ) Black/African American Non-Hispanic</th>
<th>( ) Chicano/Mexican American</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Hispanic</td>
<td>( ) American Indian/Alaskan Native</td>
<td>( ) Asian/Pacific Islander (Asian American)</td>
</tr>
</tbody>
</table>

**NOTE:** For purposes of this question, you are multiracial if you have parents from more than one of the categories listed above.

<table>
<thead>
<tr>
<th>Permanent Mailing Address (Number and Street)</th>
<th>Telephone (including Area Code)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City</th>
<th>State or Foreign Country</th>
<th>Zip Code</th>
<th>County</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date of Birth (Month, Day, Year)</th>
<th>Place of Birth</th>
<th>U.S. Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State or Country</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Are you a permanent resident alien? Yes No

Country of Present Citizenship if Non-U.S. Citizen

<table>
<thead>
<tr>
<th>VISA Type</th>
<th>VISA Number</th>
</tr>
</thead>
</table>

Have you previously attended, or taken courses at Michigan State University? Yes No

Year Term/Semester MSU Student Number/PID

List below the name of the high school currently attending, address, and dates of attendance:

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>City</th>
<th>State</th>
<th>Attendance Dates (Month and Year)</th>
<th>Expected Graduation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>From</td>
<td>to</td>
</tr>
</tbody>
</table>

List the MSU courses you wish to enroll for this semester:

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Number</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HIGH SCHOOL AUTHORIZATION**

NOTE: To be filled out by the Principal or Counselor of the high school where the applicant is presently enrolled.

I certify that ___________________________ is enrolled at ___________________________ and has my approval to apply for admission to Michigan State University in accordance with the guidelines governing admission and enrollment of High Achieving High School Students. The above course(s) are compatible with this student’s academic program and suitable for his/her background and qualifications.

Signature ___________________________ Title ___________________________

Level Des Enr Term EID

PID Date Keyed

Michigan State University is an affirmative action, equal-opportunity institution

Rev. 9/98
GUIDELINES TO GOVERN ADMISSION AND ENROLLMENT:

1. An official high school transcript must accompany this application.

2. A $60.00 application fee is required of the student and should be included when mailing this application. Please make check/money order payable to Michigan State University. Thirty-five dollars of the fee is non-refundable, unless the student is not accepted into the program. In that case the whole fee will be refunded.

3. Applications must be submitted by March 31, 2008; however, late applications will be considered if room is available. NOTE: Meeting the minimal eligibility requirements is necessary, but does not imply automatic acceptance.

4. Admission to the High Achievers program will be granted for one summer at a time. Students must submit a new application for each desired summer of enrollment.

5. Students must have at least a 3.5 cumulative grade point average in college-prep courses to qualify. High Achievers classes are honors sections of the courses, meaning an especially high level of work is expected.

6. Students who are accepted will be permitted to enroll for one course.

7. This application process is only for those courses listed on the High Achievers brochure.

8. Students who enroll will be charged the regular tuition for the course, rather than the Lifelong Education rate.

9. Credit will be awarded by Michigan State University for successful completion of the course.

10. Admission of a student as a High Achieving High School Student does not assure regular admission to Michigan State University. If the student desires to enroll as an MSU student upon completion of high school graduation requirements, the regular application for admission must be presented to the university.

11. Students enrolled at MSU as High Achieving High School Students will be subject to all university rules and regulations, which apply to regularly enrolled students.

12. Transportation arrangements to and from the university and parental approval for participation shall be the responsibility of the student.

13. Students admitted under this program will not be eligible for financial aid from the university. Students requiring financial assistance are encouraged to complete the GATE Financial Aid Request Form included with this package of forms.
APPLICATION FORM
JUNE 17 - JULY 17, 2008

Applicant’s Name (Last/First) ____________________________________________________________

Applicant’s Date of Birth _____-____-_____ Age _____ Sex _____ Expected Year of Graduation

Applicant’s Mailing Address ____________________________________ E-mail ______________________

Street City State Zip

Telephone (            ) _____________________________ Cell Phone Number ____________________________

Name of School ___________________________________ School Telephone (            ) ____________________________

School District _________________________________________________________________________________________

School Address ____________________________________

Street City State Zip

Name of School Counselor _______________________________________________________________________________

Father’s/Guardian’s Name ________________________________________ Daytime Telephone ________________________

Mother’s/Guardian’s Name _______________________________________ Daytime Telephone ________________________

Home Telephone (            ) ________________________________ E-Mail Address _________________________________

Parent’s/Guardian’s Address (if different than applicant’s) Street City County State Zip

Applicant’s Vocational Choice _____________________________ Intended College Major ______________________

Have you ever been dismissed, suspended, or placed on probation for poor scholastic work or disciplinary reasons?
No _____ Yes _____ If yes, please give details on a separate sheet of paper and attach it to this application.

PERMISSION AND AUTHORIZATION

Pursuant to the Family Educational Rights and Privacy Act, I give my permission for faculty and/or staff in the Office of Gifted and Talented Education to release information from my educational records to my parent(s) and/or legal guardian(s).

Applicant’s Signature _____________________________ Date ______________________

Parent’s/Guardian’s Signature _____________________________ Date ______________________

This form is to be sent with the rest of the High Achievers application to
Michigan State University, Office of Gifted and Talented Education,
186 Bessey Hall, East Lansing, MI 48824-1033

Postmarked by March 31, 2008
1) Please write a paragraph telling why you want to take the course of your choice. Include information about any courses you have had that may have helped in your preparation for the course.

2) If you are not able to get your first choice course, what is your second choice and why? Please mention only courses you would be willing to take.
GATE Financial Aid Request Form

A few financial aid grants will be available for students who would not be able to attend the program without financial assistance. If you wish to be considered for financial assistance, please complete this form and furnish the information requested. Financial aid applicants are expected to pay the application fee.

Fill out this form only if you are requesting financial assistance.

Student’s Name______________________________________________

Address____________________________________________________________________

City_________________________________________State___________Zip____________

Home Telephone_________________________________E-mail

School________________________________________________________

School Address____________________________________________________________________

City_________________________________________State___________Zip____________

1. Parents or guardian, please provide verification that your child qualifies for government programs: i.e. free or reduced lunch, HUD housing, etc to be considered for GATE financial aid.

2. Parents or guardians should include any additional information which will support the student’s need for Financial assistance.

3. The costs for a 3-credit course and a 4-credit course for High Achievers are indicated below. Partial financial assistance grants are available.

<table>
<thead>
<tr>
<th>COST FOR 3 CREDIT HOURS</th>
<th>COST FOR 4 CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$840.00</td>
<td>$1120.00</td>
</tr>
</tbody>
</table>

Please state the amount of assistance you feel is essential: _______________________________

Parent’s/Guardian’s Signature ______________________________________________________ Date ______________

Return this form by March 31, 2008 to: The Office of Gifted and Talented Education
186 Bessey Hall
Michigan State University
East Lansing, MI 48824-1033
ABOUT COST

1. Michigan State University is offering a scholarship to each student who is accepted as a participant in High Achievers for summer 2008. The scholarship is equal to the difference in cost of tuition for a lifelong education student and a full-time freshman at Michigan State University. In-coming freshman to MSU, who do receive High Achievers financial aid, will be responsible for the MSU matriculation fees and taxes minus the High Achievers scholarship.

2. A 3-credit course costs $1136.25, minus the $296.25 scholarship, equals $840.00. A 4-credit course costs $1,515.00, minus a $395.00 scholarship, equals $1,120.00.

3. Students must send a $60.00 application fee when applying to participate in High Achievers. Please make check/money order payable to Michigan State University. Thirty-five dollars of the fee is nonrefundable unless the student is not accepted into the program. In that case the whole fee will be refunded. The $60.00 fee is for program purposes, and does not reduce the tuition amount to be paid.

4. Students accepted to participate in the program will be billed electronically by the Office of Student Accounts and will be required to pay the tuition cost of $840.00 or $1,120.00.

5. Students accepted for participation will need to purchase required textbook/materials. The textbook costs vary for each class, but should not be more than $100.00 for a new book (used books are often available).

6. A limited number of partial financial aid grants are available for qualifying students, based on need. Families who cannot pay the full tuition cost should apply for this service by completing the GATE Financial Aid Request Form and by furnishing the requested information. The information should provide documentation of need. This information will be treated in a confidential manner.

International students (non-U.S. citizens) will be required to pay an additional fee of $25.00 to Michigan State University.

ABOUT TRANSPORTATION

Transportation to and from Michigan State University is the responsibility of the student and parent.