

Calming the Chaos: Pre-Enrollment for Incoming Students

AACRAO 2013
Session 362

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Session Overview

- Introduction to Michigan State University
- Pre-Enrollment System
 - Goal and timeline
 - System overview and example screenshots
 - Program logic
 - Reports and data
 - Advisor Feedback
 - Future Plans

Michigan State University

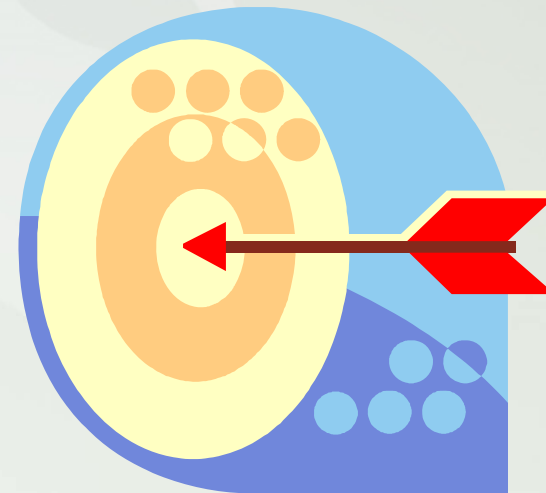
- Nation's pioneer Land Grant institution
- Located in East Lansing, MI
- 17 colleges
- 200 programs of undergraduate, graduate, and professional study
- Fall 2012 student population: 48,906
 - 36,747 undergrads
 - 8,154 first time freshmen
 - 1,449 new transfer

Academic Orientation Program (AOP)

- Runs from early June to late July
- Regular sessions: 20 Freshman; 3 Transfer
- 300+ students per session
- Large, late international session

Pre-Enrollment Goal

- Enroll incoming students into major-specific recommended and required courses before AOP, leaving more time for academic advising and other important orientation activities



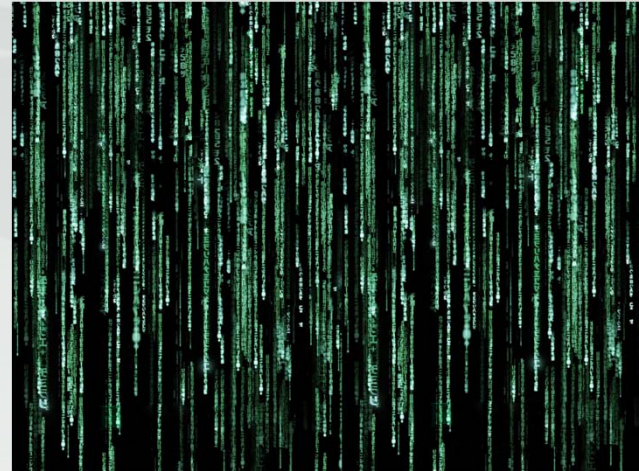
Pre-Enrollment Timeline

- Late April: preliminary seat demand report
- Early May: academic units finalize the matrix
- Mid-May: re-run seat demand
- Late-May: run pre-enrollment



Plans by Major (aka “The Matrix”)

- Online system
- Records recommended and required courses by major
- Basic or Advanced
 - Basic: One plan for all students in major
 - Advanced: Plan based on math placement score
- Specific Course vs. Group Options
 - Specific Course: student will be enrolled in exact course, one second choice allowed
 - Group Options: students will be enrolled in one course from a group of up to 6 choices



System Changes for 2013

- System originally had “Student Selection” piece
- However...
 - More than 6,000 admits emailed
 - Less than 50% used system
 - 2.36 enrollments per admit
- Student Selection removed for this year. All courses will be pre-enrolled by program. When there is a course choice, a random selection is made.

Basic Matrix

Other Core Classes

- Writing and Integrative Studies
- Term and course selection
- Section specific options

WRA ←

Select a term for WRA enrollment. If "None" is selected, students will NOT be pre-enrolled in WRA.
 Check the "Any" box if any WRA course below can be used to build a student's schedule. Courses will be selected randomly.
 To limit selection, check individual courses and, as needed, identify specific sections.
 WARNING: If the "Any" box is checked this will OVERRIDE individual course selections.

If the student has ACT English <= 15 or SAT Verbal <=390 and the Term for WRA is **not 'None'**, the student will be pre-enrolled in 0102/1004.
 International students with no ACT English or SAT Verbal scores will be pre-enrolled in 0102/1004, if the Term for WRA is **not 'None'**.

Term:

Any WRA Course:

Course Selection	Sections
WRA 0102 * <input type="checkbox"/>	<input type="text"/>
WRA 1004 * <input type="checkbox"/>	<input type="text"/>
WRA 110 <input type="checkbox"/>	<input type="text"/>
WRA 115 <input type="checkbox"/>	<input type="text"/>
WRA 125 <input type="checkbox"/>	<input type="text"/>
WRA 130 <input type="checkbox"/>	<input type="text"/>
WRA 135 <input type="checkbox"/>	<input type="text"/>
WRA 140 <input type="checkbox"/>	<input type="text"/>
WRA 145 <input type="checkbox"/>	<input type="text"/>
WRA 150 <input type="checkbox"/>	<input type="text"/>

IAH ←

Select a term for IAH enrollment. If "None" is selected, students will NOT be pre-enrolled in IAH.
 Check the "Any" box if any IAH course below can be used to build a student's schedule. Courses will be selected randomly.
 To limit selection, check individual courses and, as needed, identify specific sections.
 WARNING: If the "Any" box is checked this will OVERRIDE individual course selections.

Term:

Any IAH Course:

Course Selection	Sections
IAH 201 <input type="checkbox"/>	<input type="text"/>
IAH 202 <input type="checkbox"/>	<input type="text"/>

Basic Matrix – Specific Course

- Up to 10 courses for Fall/Spring
- Term and course selection
- Section specific options
- First and second (optional) choices

Specific Course Enrollment ←

Please list the specific courses in which you would like your students automatically pre-enrolled.

Group	First Choice				Second Choice			
	Term	Subject	Course	Sections	Term	Subject	Course	Sections
1	Fall				Fall			
2	Fall				Fall			
3	Fall				Fall			
4	Fall				Fall			
5	Fall				Fall			
6	Fall				Fall			
7	Fall				Fall			
8	Fall				Fall			
9	Fall				Fall			
10	Fall				Fall			

Basic Matrix Example

Math

Math courses will always be pre-enrolled in the Fall. If Fall is full, Spring enrollment will be attempted.
 If a student has **not** taken the math placement exam, the student will **not** be enrolled in the math class. The pre-enrollment system will attempt to enroll the student in all other courses in the plan.
 Exception: students with an ACT Math of 28+ or SAT Math of 640+ will be placed in the 19+ math course.

Math Score	First Choice			Second Choice		
	Subject	Course	Sections	Subject	Course	Sections
0-9	MTH	1825				
10-11	MTH	103				
12-14	MTH	116				
15-18	MTH	116				
19+	MTH	116				

WRA

Select a term for WRA enrollment. If "None" is selected, students will NOT be pre-enrolled in WRA.
 Check the "Any" box if any WRA course below can be used to build a student's schedule. Courses will be selected randomly.
 To limit selection, check individual courses and, as needed, identify specific sections.
 WARNING: If the "Any" box is checked this will OVERRIDE individual course selections.
 If the student has ACT English <= 15 or SAT Verbal <=390 and the Term for WRA is **not 'None'**, the student will be pre-enrolled in 0102/1004.
 International students with no ACT English or SAT Verbal scores will be pre-enrolled in 0102/1004, if the Term for WRA is **not 'None'**.

Term:

Any WRA Course:

Course Selection	Sections
WRA 0102 *	
WRA 1004 *	
WRA 110 <input type="checkbox"/>	
WRA 115 <input type="checkbox"/>	
WRA 125 <input type="checkbox"/>	
WRA 130 <input type="checkbox"/>	
WRA 135 <input type="checkbox"/>	

Basic Matrix Example

Specific Course Enrollment

Please list the specific courses in which you would like your students automatically pre-enrolled.

Group	First Choice				Second Choice			
	Term	Subject	Course	Sections	Term	Subject	Course	Sections
1	Fall ▼	ANS	110		Spring ▼	ANS	110	
2	Fall ▼	ANS	101		Fall ▼			
3	Fall ▼	CEM	141		Spring ▼	CEM	141	
4	Spring ▼	CEM	161	001-003,005	Fall ▼			
5	Fall ▼				Fall ▼			
6	Fall ▼				Fall ▼			
7	Fall ▼				Fall ▼			
8	Fall ▼				Fall ▼			
9	Fall ▼				Fall ▼			
10	Fall ▼				Fall ▼			

Group Options

Please list groups of courses from which the students will be enrolled in **one** course from each group.

IMPORTANT: Students will be enrolled in one course from **each** course group below.
 If your intent is that a student should be enrolled Course A or Course B or Course C, those courses should be listed *within* one group.
 If your intent is that a student should be enrolled in Course A or Course B **and** Course C or Course D,
 Course A and B should be in Group 1 and Course C and D should be in Group 2.

Group	Choices			
	Term	Subject	Course	Sections
1	Fall ▼	FW	181	
		FW	211	
		ESA	200	
		CJ	110	
		CSE	101	

Basic Matrix Summary View

0267 Animal Science

	Math Score	First Choice	Second Choice
Math			
	0-9	MTH 1825	
	10-11	MTH 103	
	12-14	MTH 116	
	15-18	MTH 116	
	19+	MTH 116	
WRA			
		Fall WRA *	
IAH			
		Spring IAH *	
ISS			
		Spring ISS *	
Specific Course			
		Fall ANS 110	Spring ANS 110
		Fall ANS 101	
		Fall CEM 141	Spring CEM 141
		Spring CEM 161 001-003,005	
Group Options			
		Group 1: Fall FW 181, Fall FW 211, Fall ESA 200, Fall CJ 110, Fall CSE 101	

Advanced Matrix Summary View

1056 Accounting (Advanced Matrix)			
	Math Score	First Choice	Second Choice
0-9 Plan			
Math	0-9	MTH 1825	
WRA		Fall WRA *	
ISS		Spring ISS *	
Specific Course		Fall CSE 101 Spring MTH 103	
Group Options		Group 1: Fall FI 311, Fall EC 202, Fall EC 201, Fall ACC 201, Fall ZOL 101	
10-11 Plan			
Math	10-11	MTH 103	
WRA		Spring WRA *	
ISS		Fall ISS *	
Specific Course		Spring EC 201 001-011 Spring MTH 124 Fall CSE 101	Spring EC 202 001-004
12-14 Plan			
Math			

Preliminary Seat Demand Report

- Sent to colleges prior to pre-enrollment

	CourseList	Term	Seats_Needed
1	CAS 110	FS13	20
2	CAS 110	SS14	38
3	CAS 111	FS13	44
4	CAS 111	SS14	10
5	CAS 112	FS13	10
6	CAS 112	SS14	20
7	CE 271	SS14	15
8	CEM 141	FS13	357
9	CEM 141	SS14	48
10	CEM 142	SS14	108
11	CEM 151	FS13	80
12	CEM 152	SS14	74
13	CEM 161	FS13	415
14	CEM 161	SS14	43
15	CEM 162	SS14	131
16	CEP 240	FS13	6
17	CHS 101	FS13	2
18	CHS 102	SS14	2
19	CJ 110 001	FS13	54

Pre-enrollment Program

- Query for student population
- Determine student major – find matrix
- Calculate non-conflicting schedule
- If first attempt fails...
 - Second choice
 - Move math to spring
 - Skip course(s)
- Enroll student
- Record/review errors



Pre-enrollment Reports

Successfully Scheduled

'Errors' represent scheduled courses that encountered an error when loaded to SIS.

PID Count	Total Enrollments	Avg Enrollments	Total Errors	Avg Errors
7895	28581	3.62	4441	0.56

Major Code	Major Desc	PID Count	Total Enrollments	Avg Enrollments	Total Errors	Avg Errors
0101	Agr & Nat Res - No Preference	11	12	1.09	3	0.27
0267	Animal Science	59	204	3.46	43	0.73
0312	Crop and Soil Sciences	11	9	0.82	2	0.18
0338	Fisheries and Wildlife	12	59	4.92	5	0.42
0349	Food Science	10	55	5.5	7	0.7

Scheduled Courses

Click on a course to view a detailed course report.

Term	Course	Enrolled Count	Error Count
FS12	ABM 100	28	0
FS12	ACR 202	0	1
FS12	ADV 205	58	0
FS12	ANP 201	32	0
FS12	ANS 101	14	0
FS12	ANS 110	71	0
FS12	ARB 101	3	0
FS12	BE 101	24	0
FS12	BMB 101	102	23

*Numbers from 2012 and do not represent the student selection piece.

Pre-enrollment Reports (cont'd)

Successfully Scheduled - count by number of attempts to schedule

Major Code	Major Desc	Schedule Attempts	PID Count	Total Enrollments	Avg Enrollments	Total Errors	Avg Errors
0101	Agr & Nat Res - No Preference	1	11	12	1.09	3	0.27
0267	Animal Science	1	13	55	4.23	11	0.85
0267	Animal Science	3	46	149	3.24	32	0.7
0312	Crop and Soil Sciences	1	11	9	0.82	2	0.18
0338	Fisheries and Wildlife	1	12	50	4.17	5	0.42
2901	James Madison	1	249	1142	4.59	88	0.35
2901	James Madison	3	70	262	3.74	19	0.27
3470	Lyman Briggs	1	326	1696	5.2	139	0.43
3470	Lyman Briggs	3	237	641	2.7	523	2.21
3576	Chemistry	1	9	32	3.56	7	0.78

Click on a PID to see all pre-enrollment activity for the student.

Major Code	Major Desc	Schedule Attempts	PID
0101	Agr & Nat Res - No Preference	1	
0101	Agr & Nat Res - No Preference	1	
0101	Agr & Nat Res - No Preference	1	
0101	Agr & Nat Res - No Preference	1	
0101	Agr & Nat Res - No Preference	1	
0101	Agr & Nat Res - No Preference	1	

Advisor Feedback

...we gained time to engage in real and impactful conversations...

...ensures that students are not significantly disadvantaged by their AOP date...

...this gives a clearer picture for course demand...

...we knew where the [course demand] pressure was based on the pre-enrollment system...

...easier to advise students at AOP when major-related/university-required classes are already on their schedule...

...student has already engaged in making his/her own decisions ...ready to start digging deeper...

Coming to AOP having at least a partial schedule set makes the experience a little less scary.

...faster, easier enrollment lab experience...easier for students to make enrollment choices ...less stressful...

Going Forward

- Increase seat availability awareness for pre-enrollment
- All admits take math placement
- Periodic course demand reports throughout AOP
- Use the “schedule generator” code in our Schedule of Courses/Enrollment system

Questions?

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