

Graduate Student Experience Survey (2009)
Program Satisfaction, Satisfaction with Advisor and Program Climate
Summary for the College of Arts and Sciences – Natural Sciences Division

Program Satisfaction:

The three tables about Program Satisfaction show the percentages of students who rated their graduate programs as Excellent on a 5- point scale, Excellent or Very Good (combined) on that scale, and Fair or Poor (combined) on that scale.

Reading across these tables Human Physiology and Math emerge as the strongest programs in terms of student satisfaction. Students in Physics were significantly more likely than students in other programs to rate their satisfaction as only Fair or Poor. Students in Computer and Information Science (CIS) did not reach the Excellent threshold on any feature of their graduate program and they rated the program as only Fair or Poor more than any other program department in this division except Physics.

Overall, program satisfaction in the Natural and Physical Sciences was greatest in the following areas:

- ✓ Quality of the faculty
- ✓ Keeping pace with developments in the field
- ✓ Professional training and/or research opportunities
- ✓ Opportunities to present research
- ✓ Intellectual community

Areas that warrant concern either because of relatively higher expressed dissatisfaction or comparatively lower strong satisfaction are:

- ✓ Adequacy of preparation for teaching
- ✓ Adequacy of training about professional ethics/academic integrity
- ✓ Clarity of evaluation criteria
- ✓ Processes for involving students in decisions that affect them
- ✓ Effort to promote a diverse, inclusive community
- ✓ Financial support for graduate students (in some departments)

Advisors:

The two Advisor tables show the percentages of students who agreed or disagreed with positive statement about their advisors. Student satisfaction with their advisors is generally high; it is highest in Geological Sciences, Human Physiology and Psychology. Students in CIS were more likely than in other programs to register dissatisfaction with their advisors.

Students are most satisfied with their advisors in the following areas:

- ✓ Encourages students in their scholarly pursuits
- ✓ Treats students' ideas with respect

- ✓ Treats students equitably
- ✓ Helps secure funding

Areas that warrant attention either because of lower expressed satisfaction or higher dissatisfaction include the following:

- ✓ Help them develop professional relationships in their fields
- ✓ Make them feel comfortable expressing concerns they have in graduate school
- ✓ Emphasize the importance of professional ethics

Program Climate:

We asked students to rate 13 positive descriptors of program climate, choosing from a 5-point scale from Very (like the descriptor) to Not at All (like the descriptor). There are three tables for program climate. The first climate table shows the percentage of respondents who chose the top (most positive) rating, the second shows the percentage for the top two (positive) ratings combined, and the third shows the percentage who chose one of the bottom two (negative) ratings.

Students in Human Physiology were the most likely to rate their program climate as Excellent, followed by students in Biology, Chemistry, CIS, Geological Sciences, and Psychology. Students in Physics were much less likely to rate program climate as Excellent than were students in other programs and were more likely to rate program climate as only Fair or Poor.

Within the Natural and Physical Sciences departmental climates are perceived to be most positive in the following areas:

- ✓ Welcoming
- ✓ Respectful
- ✓ Encouraging
- ✓ Supportive
- ✓ Inclusive by sexual orientations
- ✓ Fosters community among graduate students

The most significant climate issues as indicated either by a comparatively higher percentage of Fair or Poor ratings or fewer positive ratings are:

- ✓ Racial inclusivity
- ✓ Diversity
- ✓ Accommodating of students with disabilities

College of Arts and Sciences: Natural and Physical Sciences
PERCENTAGE OF RESPONDENTS WHO RATED THEIR PROGRAM AS "EXCELLENT" BY PROGRAM

Program Satisfaction (Total # of Respondents by Program)

	BIO (55)	CHEM (57)	CIS (22)	GEO SCI(15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Quality of the faculty	38.6	27.1	20.2	40.3	58.6	53.7	6.5	31.2
Program's performance in keeping pace with recent trends and developments in my field	39.2	34.2	9.4	36.7	55.7	54.8	10.1	24.9
Professional training and/or research opportunities in my program	33.6	33.5	10.0	25.3	61.6	51.0	7.2	30.0
Adequacy of preparation for my teaching	12.6	13.2	4.5	0.0	27.3	46.6	0.0	15.3
Quality of academic guidance and advising	16.9	16.1	9.1	12.7	39.7	18.3	6.5	33.3
Support for interdisciplinary inquiry	27.7	30.3	0.0	25.3	15.3	0.0	10.7	17.1
Clarity of evaluation criteria used to assess graduate students	12.5	9.0	0.0	0.0	16.6	21.8	9.5	12.5
Fairness of evaluation criteria used to assess graduate students	16.3	12.0	0.0	6.9	23.7	19.1	13.5	19.9
Adequacy of training about professional ethics/academic integrity	12.9	16.1	9.1	6.1	30.3	24.5	3.6	15.3
Opportunities to present my research, studio projects or performances	43.4	46.6	5.0	63.3	39.7	50.4	31.2	44.3
Intellectual community in the program	48.3	48.4	0.0	49.4	36.8	69.3	23.1	39.7
Financial support for graduate students	25.9	37.4	9.4	25.3	26.7	47.7	37.5	12.0
Space, facilities and equipment	18.4	26.9	18.5	42.4	33.8	28.6	30.9	9.7
Process for involving graduate students in program decisions that affect graduate students	9.1	10.8	9.1	12.7	26.7	9.1	10.1	15.1
Effort to promote a diverse, inclusive community	13.0	18.1	5.5	0.0	33.8	22.5	7.4	22.6
Overall Program Quality	16.7	21.1	4.5	18.4	41.0	43.9	3.6	24.3

*light green shading indicates that 33.3% or more of respondents rated their program as "Excellent."

**dark green shading indicates that 50% or more of respondents rated their program as "Excellent."

College of Arts and Sciences: Natural and Physical Sciences
PERCENTAGE OF RESPONDENTS WHO RATED THEIR PROGRAM AS "EXCELLENT" or "VERY GOOD" BY PROGRAM

Program Satisfaction	(Total # of Respondents by Program)							
	BIO (55)	CHEM (57)	CIS (22)	GEO SCI (15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Quality of the faculty	87.3	85.4	69.7	100.0	81.7	74.7	84.0	90.3
Program's performance in keeping pace with recent trends and developments in my field	79.9	85.4	48.3	87.3	93.5	81.7	66.8	74.0
Professional training and/or research opportunities in my program	74.3	79.4	67.5	87.3	87.7	78.5	63.9	75.6
Adequacy of preparation for my teaching	39.4	35.5	48.4	75.9	55.0	87.6	20.6	33.6
Quality of academic guidance and advising	55.9	52.4	61.1	58.8	87.0	49.8	30.5	75.8
Support for interdisciplinary inquiry	58.2	67.3	37.6	75.9	62.8	19.7	30.9	51.2
Clarity of evaluation criteria used to assess graduate students	39.0	43.7	33.5	20.8	59.9	53.7	32.3	56.3
Fairness of evaluation criteria used to assess graduate students	54.5	55.1	52.9	46.1	68.0	59.5	40.6	61.4
Adequacy of training about professional ethics/academic integrity	44.7	38.6	57.5	35.6	77.6	55.8	19.6	59.3
Opportunities to present my research, studio projects or performances	85.5	82.8	71.9	87.4	84.7	72.0	87.2	78.6
Intellectual community in the program	89.7	87.0	61.9	81.7	78.2	88.2	84.0	89.9
Financial support for graduate students	61.2	66.5	38.4	74.7	55.1	90.8	74.6	32.4
Space, facilities and equipment	61.5	59.2	56.9	80.4	59.9	47.5	83.3	32.8
Process for involving graduate students in program decisions that affect graduate students	31.8	33.9	42.9	45.0	52.1	64.3	42.7	64.0
Effort to promote a diverse, inclusive community	44.3	46.1	42.4	51.8	61.5	44.8	34.5	59.2
Overall Program Quality	84.3	76.4	53.4	94.3	84.7	84.3	66.1	85.3

*light green shading indicates that 50% or more of respondents rated their program as "Excellent" or "Very Good."

**dark green shading indicates that 75% or more of respondents rated their program as "Excellent" or "Very Good."

College of Arts and Sciences: Natural and Physical Sciences
PERCENTAGE OF RESPONDENTS WHO RATED THEIR PROGRAM AS "FAIR" or "POOR" BY PROGRAM

Program Satisfaction	(Total # of Respondents by Program)							
	BIO (55)	CHEM (57)	CIS (22)	GEO SCI (15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Quality of the faculty	0.0	1.9	14.7	0.0	3.6	2.7	2.9	4.9
Program's performance in keeping pace with recent trends and developments in my field	4.1	5.8	19.0	0.0	3.6	6.4	3.6	9.9
Professional training and/or research opportunities in my program	6.1	3.8	14.1	0.0	6.5	6.4	13.0	2.5
Adequacy of preparation for my teaching	22.7	14.9	9.1	11.4	5.9	9.1	35.1	26.0
Quality of academic guidance and advising	20.3	14.2	19.1	5.7	2.9	18.8	26.7	14.5
Support for interdisciplinary inquiry	15.0	12.9	24.0	17.1	12.4	6.9	23.1	14.0
Clarity of evaluation criteria used to assess graduate students	24.5	14.9	19.0	35.5	16.0	15.6	41.7	9.9
Fairness of evaluation criteria used to assess graduate students	23.1	10.6	14.1	11.4	6.5	12.4	37.2	9.4
Adequacy of training about professional ethics/academic integrity	15.7	20.7	24.0	24.2	6.5	18.9	37.4	12.2
Opportunities to present my research, studio projects or performances	1.7	1.9	9.1	0.0	6.5	3.2	3.0	5.3
Intellectual community in the program	3.5	3.5	14.1	6.9	6.5	5.9	5.9	2.5
Financial support for graduate students	8.8	12.7	28.1	19.6	26.1	5.9	3.6	34.1
Space, facilities and equipment	9.3	9.0	14.1	0.0	7.2	22.1	0.0	29.0
Process for involving graduate students in program decisions that affect graduate students	34.1	28.3	18.2	18.4	7.1	15.6	20.2	7.3
Effort to promote a diverse, inclusive community	12.8	16.5	15.5	11.4	9.4	6.2	37.6	14.0
Overall Program Quality	3.4	1.9	21.0	0.0	6.5	5.9	0	4.8

*red shading indicates that 20% or more of respondents rated their program as "Fair" or "Poor."

College of Arts and Sciences: Natural and Physical Sciences

PERCENTAGE OF RESPONDENTS WHO STRONGLY AGREED WITH EACH OF THE FOLLOWING STATEMENTS ABOUT THEIR ADVISOR

Advisor	(Total # of Respondents by Program)							
	Bio (50)	Chem (52)	CIS (22)	GEO SCI (16)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Encourages me in my scholarly pursuits	54.4	56.2	42.8	70.2	84.7	56.1	56.5	75.8
Treats my ideas with respect	44.8	41.9	37.3	50.6	78.2	52.7	59.6	70.1
Provides valuable feedback on my work	45.7	46.9	42.8	77.2	81.7	45.7	37.4	65.7
Provides timely feedback on my work	39.0	39.1	37.3	57.6	68.1	32.5	41.7	29.5
Is available when I need help or advice	44.6	35.1	41.8	64.5	64.5	56.1	51.5	48.9
Communicates effectively with students across cultural and linguistic boundaries	35.3	32.6	41.8	53.1	58.6	40.0	44.1	61.4
Treats students in the department equitably	37.2	40.1	52.7	64.5	62.2	53.9	50.9	61.4
Has emphasized the importance of professional ethics	28.8	46.2	52.7	26.5	68.1	39.4	32.3	50.9
Helps me secure funding for my graduate studies, research or creative work	56.8	54.0	30.9	74.7	49.2	30.6	52.2	50.1
Helps me develop professional relationships with others in the field	40.1	38.7	41.8	51.8	68.7	37.5	33.0	44.8
Advises me about how to get my work published, performed, or shown	42.7	43.8	42.8	64.5	63.2	41.0	44.7	64.2
Encourages the expression of intellectual differences	27.6	29.5	37.3	39.2	63.8	41.0	29.2	51.2
Makes me feel comfortable talking about concerns I am facing in graduate school	38.0	35.9	47.3	33.5	64.5	43.5	23.9	53.0

*light green shading indicates that 50% or more of respondents strongly agreed with the above dimensions about their advisor.

**dark green shading indicates that 75% or more of respondents strongly agreed with the above dimensions about their advisor.

College of Arts and Sciences: Natural and Physical Sciences

PERCENTAGE OF RESPONDENTS WHO DISAGREED OR STRONGLY DISAGREED WITH EACH OF THE FOLLOWING STATEMENTS ABOUT THEIR ADVISOR

Advisor	(Total # of Respondents by Program)							
	BIO (55)	CHEM (57)	CIS (22)	GEO SCI (15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Encourages me in my scholarly pursuits	6.7	2.2	15.4	0.0	0.0	0.0	0.0	2.3
Treats my ideas with respect	8.2	4.4	5.5	0.0	0.0	0.0	3.0	0.0
Provides valuable feedback on my work	5.9	5.7	20.0	0.0	0.0	0.0	3.7	2.3
Provides timely feedback on my work	5.9	15.7	30.8	0.0	3.6	0.0	7.4	14.8
Is available when I need help or advice	3.6	13.5	20.9	0.0	6.5	6.9	3.7	9.7
Communicates effectively with students across cultural and linguistics boundaries	12.2	3.9	0.0	0.0	0.0	3.5	3.7	4.6
Treats students in the department equitably	3.7	10.4	0.0	5.7	9.5	0.0	7.4	7.4
Has emphasized the importance of professional ethics	10.4	5.7	5.5	5.7	2.9	0.0	7.6	9.7
Helps me secure funding for my graduate studies, research or creative work	7.3	8.3	20.9	11.4	6.5	2.9	0.0	9.2
Helps me develop professional relationships with others in the field	18.2	8.3	20.9	29.8	3.6	9.2	6.9	9.2
Advises me about how to get my work published, performed, or shown	16.0	6.2	15.5	17.1	3.7	2.9	3.8	9.7
Encourages the expression of intellectual differences	12.5	4.3	10.9	11.4	3.7	2.9	14.6	7.4
Makes me feel comfortable talking about concerns I am facing in graduate school	22.7	8.2	20.9	17.1	13.0	0.0	13.5	12.5

*red shading indicates that 20% or more of respondents disagreed or strongly disagreed with the statements above about their advisor.

College of Arts and Sciences: Natural and Physical Sciences
PERCENTAGE OF RESPONDENTS WHO RATED THE CLIMATE AS VERY MUCH LIKE THE DESCRIPTION (1 ON A 5 POINT SCALE)

Climate	(Total # of Respondents by Program)							
	Biology (50)	Chem (52)	CIS (20)	GEO SCI (16)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Welcoming	58.1	56.9	62.8	49.4	63.5	52.5	52.4	66.7
Respectful	50.9	42.0	52.5	38.0	56.3	56.3	39.4	61.6
Encouraging	48.1	43.6	42.9	50.6	65.8	47.2	5.9	51.4
Racially inclusive (race and ethnicity)	31.6	31.9	43.4	38.0	62.2	42.6	13.3	35.8
Gender equitable	54.8	49.1	38.4	75.9	55.7	31.5	9.7	47.8
Family-friendly	34.5	34.2	37.6	32.3	57.6	43.9	13.4	27.4
Diverse	14.0	15.2	30.0	6.1	36.1	9.7	12.4	15.0
Intellectually open to different theoretical, methodological or creative approaches	43.5	36.3	23.5	36.7	53.4	28.3	25.4	26.9
Accommodating for students with disabilities	24.6	22.2	47.2	7.4	33.8	39.3	17.8	30.2
Inclusive of students of all sexual orientations	48.9	46.8	36.0	46.3	50.4	36.5	26.1	49.6
Supportive	40.3	46.6	35.2	38.0	52.0	36.5	15.4	56.5
Fosters community among graduate students	42.0	47.5	24.7	36.7	38.1	54.2	42.6	41.2
Open to interdisciplinary inquiry	42.1	44.1	23.7	31.0	40.3	9.7	32.1	33.8

*light green shading indicates that 33.3% or more of respondents rated the climate as 1.

**dark green shading indicates that 50% or more of respondents rated the climate as 1.

College of Arts and Sciences: Natural and Physical Sciences

PERCENTAGE OF RESPONDENTS WHO RATED THE CLIMATE AS VERY MUCH LIKE OR LIKE THE DESCRIPTION (1 OR 2 ON A 5 POINT SCALE)

Climate

(Total # of Respondents by Program)

	BIO (55)	CHEM (57)	CIS (22)	GEO SCI (15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Welcoming	91.6	94.8	90.9	81.7	90.6	84.4	93.4	92.9
Respectful	94.6	90.9	95.9	87.4	90.5	88.2	83.4	92.9
Encouraging	82.9	79.5	61.9	87.3	84.7	81.2	79.8	92.9
Racially inclusive (race and ethnicity)	63.7	64.9	90.9	69.0	87.0	64.9	59.6	69.4
Gender equitable	92.3	81.9	77.7	88.6	84.1	44.5	56.0	81.4
Family-friendly	73.4	78.7	76.9	81.7	81.7	84.3	59.0	76.3
Diverse	42.2	41.8	75.3	47.7	68.7	46.0	60.9	53.4
Intellectually open to different theoretical, methodological or creative approaches	82.1	83.5	85.9	88.5	81.1	72.0	65.1	76.3
Accommodating for students with disabilities	64.1	66.4	73.3	46.4	66.4	71.6	59.9	64.8
Inclusive of students of all sexual orientations	88.4	86.7	84.5	80.5	72.2	74.9	69.1	88.3
Supportive	90.6	86.3	70.0	81.7	86.6	81.0	73.3	95.2
Fosters community among graduate students	76.3	82.2	69.5	74.7	66.2	88.2	82.1	74.8
Open to interdisciplinary inquiry	84.0	90.7	69.7	94.3	81.0	49.3	66.2	87.8

*light green shading indicates that 50% or more of respondents rated the climate as 1 or 2.

**dark green shading indicates that 75% or more of respondents rated the climate as 1 or 2.

College of Arts and Sciences: Natural and Physical Sciences

PERCENTAGE OF RESPONDENTS WHO RATED THE CLIMATE AS VERY MUCH NOT LIKE OR NOT LIKE THE DESCRIPTION (4 OR 5 ON A 5 POINT SCALE)

Climate

(Total # of Respondents by Program)

	BIO (55)	CHEM (57)	CIS (22)	GEO SCI (15)	HUM PHYS (31)	MATH (34)	PHYSICS (30)	PSYCH (40)
Welcoming	0.0	0.0	4.1	5.7	0.0	5.9	0.0	2.5
Respectful	1.8	0.0	0.0	0.0	2.9	3.2	0.0	2.5
Encouraging	0.0	2.0	9.1	0.0	3.6	18.9	2.9	4.8
Racially inclusive (race and ethnicity)	8.0	15.2	0.0	5.7	10.0	6.7	20.2	9.4
Gender equitable	0.0	3.5	8.2	0.0	3.6	12.4	20.2	7.1
Family-friendly	2.0	3.9	0.0	5.7	6.5	0.0	6.7	4.6
Diverse	23.8	23.6	0.0	18.2	13.0	16.8	19.5	12.2
Intellectually open to different theoretical, methodological or creative approaches	1.8	3.5	0.0	0.0	3.6	9.2	10.8	6.9
Accommodating for students with disabilities	8.4	1.7	0.0	6.1	5.8	8.9	7.7	7.1
Inclusive of students of all sexual orientations	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Supportive	0.0	0.0	4.3	5.7	3.0	9.5	6.5	4.8
Fosters community among graduate students	3.6	3.5	4.3	6.9	6.8	9.2	11.1	2.3
Open to interdisciplinary inquiry	1.8	0.0	0.0	5.7	6.5	9.5	10.5	7.1

*red shading indicates that 20% or more of respondents rated the climate as 4 or 5.