

Faculty Senate Meeting
Thursday, April 24, 2014
3:30p.m.– 5:30p.m. – Adelbert Hall, Toepfer Room

AGENDA

| | | |
|-----------|--|---|
| 3:30 p.m. | Approval of Minutes from the March 31, 2014 Faculty Senate Meeting, <i>attachment</i> | S. Russ |
| 3:35 p.m. | President and Provost Announcements | B. Snyder B. Baeslack |
| 3:40 p.m. | Chair’s Announcements (including announcement of 2014-2015 Chair-Elect) | S. Russ |
| 3:45 p.m. | Report from the Executive Committee | R. Savinell |
| 3:50 p.m. | Report from the Secretary of the Corporation | C. Tremel |
| 3:55 p.m. | Finance Committee Report, <i>attachment</i> | S. Fine |
| 4:15 p.m. | Healthcare Equity Initiatives, <i>attachments</i> | N. Deming M. Garrett C. Gregory N. Ziats |
| 4:35 p.m. | Sexual Misconduct Policy, <i>attachment</i> | M. Mobley L. Stark C. Tremel P. Higgins |
| 4:55 p.m. | Wireless Health Graduate Certificates, <i>attachment</i> | G. Wnek |
| 5:00 p.m. | Dual Degrees: MBA-MS in Biochemistry MBA-MS in Medical Physiology, <i>attachments</i> | W. Merrick T. Nosek S. Peck |
| 5:10 p.m. | Pearson Test of English Academic Acceptance, <i>attachment</i> | M. De Guire |

| | | |
|-----------|---|-------------|
| 5:15 p.m. | FSCUE: Extracurricular Life and Class Attendance Resolution, <i>attachment</i> | M. De Guire |
| 5:20 p.m. | FSCUE: Non-UPF Course Review Protocol, <i>attachment</i> | M. De Guire |
| 5:25 p.m. | Presentation of 2014-15 Executive Committee, Chairs and Members of Standing Committees, <i>attachment</i> | S. Peck |
| 5:30 p.m. | Summary of 2013-14 Senate Activities and Passing of the Gavel | S. Russ |



Faculty Senate Meeting

Thursday, April 24, 2014

3:30-5:30 p.m. – Adelbert Hall, Toepfer Room

Members Present

| | | |
|-------------------|--------------------|-----------------|
| Alexis Abramson | Patricia Higgins | Simon Peck |
| Daniel Akerib | Susan Hinze | Andrew Rollins |
| Bud Baeslack | Lee Hoffer | Sandra Russ |
| Juscelino Colares | David Hussey | Robert Savinell |
| Chris Cullis | Zina Kaleinikova | David Singer |
| Mark De Guire | Kurt Koenigsberger | Barbara Snyder |
| Nicole Deming | Erin Lavik | Glenn Starkman |
| Peg DiMarco | Xiaoyu Li | Philip Taylor |
| Robin Dubin | Deborah Lindell | Mark Votruba |
| Karen Farrell | Frank Merat | Rebecca Weiss |
| Scott Fine | William Merrick | Nicholas Ziats |
| T. Kenny Fountain | Diana Morris | Richard Zigmund |
| John Fredieu | Carol Musil | |

Members Absent

| | | |
|------------------|-----------------|--------------------|
| Joseph Baar | Steven Fox | Ray Muzic |
| Richard Buchanan | Jean Iannadrea | Dale Nance |
| Matthias Buck | Mark Joseph | Pushpa Pandiyan |
| David Carney | Thomas Kelley | Benjamin Schechter |
| Susan Case | Jessica Lehmann | Nicolaus Schmandt |
| Colleen Croniger | Zheng-Rong Lu | Alan Tartakoff |
| Heath Demaree | Kathryn Mercer | Elizabeth Tracy |
| Thomas Egelhoff | Sonia Minnes | Gillian Weiss |

Others Present

| | | |
|-------------------|----------------|----------------|
| Christine Ash | Ermin Melle | John Sideras |
| Melissa Burrows | Marilyn Mobley | Lynn Singer |
| Donald Feke | Thomas Nosek | Lou Stark |
| Matthew Garrett | Sue Rivera | Colleen Trembl |
| Carolyn Gregory | Liz Roccoforte | Gary Wnek |
| Arnold Hirshon | Charles Rozek | Jeff Wolcowitz |
| Barbara Juknialis | Chris Sheridan | |

Call to Order

Professor Sandra Russ, chair, Faculty Senate, called the meeting to order at 3:30 p.m.

Approval of Minutes

The minutes of the Faculty Senate meeting of March 31, 2014 were approved as submitted.

President's Announcements

President Barbara Snyder reported that at the April 9th ceremonial groundbreaking for the Milton and Tamar Maltz Performing Arts Center, Milton and Tamar Maltz announced an increase in their gift from \$12 million to \$30 million. Their contribution will make up just about half of the total project cost of \$64 million. The university also received \$1 million from the state capital budget for think[box]. Groundbreaking for think[box] will take place in the fall. Commencement is Sunday, May 18th. All faculty are encouraged to participate. Professor Robin Dubin is the faculty marshal.

Provost's Announcements

Provost Bud Baeslack reported that this is an extremely busy time due to budget preparation for 2015. He thanked the senators for all of their hard work over the academic year.

Chair's Announcements

Prof. Sandra Russ, chair, Faculty Senate announced that Professor Roy Ritzmann, CAS, has been elected to the position of chair-elect for the 2014-15 academic year. The ad hoc Committee on Course Evaluation Implementation will be meeting over the summer to discuss the implementation process for new undergraduate course evaluations. Prof. Dubin has agreed to serve as chair of the committee. A faculty forum will be held on Thursday, May 1st to discuss the letter sent from the President to the CWRU faculty opposing the academic boycott against Israeli universities that had been proposed by the American Studies Association.

Prof. Dubin, a member of the CWRU Parking Advisory Council (PAC) reported on the Council's most recent meeting. Parking rates will increase by 4% during the next academic year. If faculty are on sabbatical, they should notify the parking office and they will not be charged during the time that they are away.

Report from the Executive Committee

Professor Robert Savinell, vice-chair of the Senate, reported on the April 10th Executive Committee meeting. The Committee discussed a number of proposed revisions and additions to the Faculty Handbook and Senate By-Laws. The Senate By-Laws Committee will draft language for the Handbook. The Executive Committee also voted to approve the chairs of Senate standing committees for the 2014-2015 academic year.

Report from Secretary of the Corporation

Ms. Colleen Trembl, deputy general counsel, reported that the Executive Committee of the Board of Trustees met on April 8, 2014. Among other items the Committee approved the CWRU 2014-2019 Academic Calendar and the issuance of degrees for distribution in May of 2014. The full report is attached to these minutes. *Attachment*

Finance Committee Report

Professor Scott Fine, chair of the Faculty Senate Finance Committee, had reported on the activities of the Finance Committee at the February 27th Faculty Senate meeting. The Senate had requested more detailed information on the university's budget and Prof. Fine presented slides on the 2014 second quarter operating forecast, the preliminary 2015 budget, the capital budget, the capital campaign, and endowment spending. The university anticipates a \$6.8 million surplus for 2014 as the result of undergraduate tuition subvention and retained surpluses within the management units. This surplus is \$1.6 million less than last year. Many of the units are in deficit and surpluses are being exhausted. This is the final year of the undergraduate tuition subvention. Undergraduate tuition for 2014-15 increased by 3.25%, which is lower than in previous years. Most of the university's financial aid budget is unfunded. New buildings are being constructed and funds to cover operating costs will be needed. A significant portion of the

capital budget is reduced by debt repayment. Endowment payouts will not increase and will continue at the same level for several more years. Because of the financial situation, discretionary spending will have to be reduced. Salary increases for the 2014-15 fiscal year will be less than in past years. A senator said that it is difficult to ask faculty to take on more work when their salaries won't increase. The President commented that the management units can prioritize salary increases if they choose. The bright spot in the university's financial situation is the capital campaign which has progressed well. Prof. Russ said that if any of the senators are interested in continuing the discussion on the university's finances they should contact her and a meeting will be scheduled. *Attachment*

Healthcare Equity Initiatives

Professor Nicole Deming, chair of the Committee on Faculty Personnel, introduced the healthcare equity proposal which had been developed by the LGBTA Committee. Prof. Deming reported that the proposal had been endorsed by the Senate Committees on Faculty Personnel, Minority Affairs and Compensation. The LGBTA Committee seeks several commitments from the university: transgender-related health care coverage for CWRU faculty and staff; equitable management of taxation of domestic partner benefits ("grossing up"); LGBT faculty and staff representation during discussions of health care equity, and lastly, a working time frame for implementation of health care equity. Professor Matthew Garrett, a member of the LGBTA Committee and spokesperson for the proposal said that the issues involved in the proposal relate to more than just financial equity for all CWRU employees. Ultimately they involve questions of human dignity and fairness.

Carolyn Gregory, Vice President for Human Resources, presented information on the financial implications of this proposal as well as proposals for adoption and in-vitro fertilization (IVF) coverage for faculty and staff. Since increased health care costs are passed on to faculty and staff, all interests must be considered. For transgender coverage, the estimated annual cost would be \$150,000. The average annual costs for "grossing up" are more difficult to predict. Only one out of 26 AAU schools in states where same-gender marriage is not recognized provides this sort of subsidy. The estimated annual cost for the subsidy could be in the range of \$250,000-\$300,000. The estimated annual cost for the health care equity proposals as well as adoption and IVF coverage would be \$350,000-\$600,000. With respect to the healthcare equity proposals, the Senate decided to vote on each issue separately. The Senate voted to endorse the recommendation for health care coverage for transgender employees and to provide LGBT faculty and staff with representation during health care equity discussions. A motion was made and seconded to postpone endorsement of the grossing up recommendation until additional research has been completed and information is provided to the Senate. The motion was approved with seven dissenting votes. *Attachment*

Sexual Misconduct Policy

Marilyn Mobley, Vice President for Inclusion, Diversity and Equal Opportunity, provided an overview of the revised Interim Sexual Misconduct Policy. The committee responsible for revising the policy had considered feedback from multiple constituents including the Faculty Senate and its standing committees. The interim policy had been revised to reflect best practices and the best compromise of concerns expressed. Key changes included clarification of reporting requirements, insuring that the composition of hearing committees is fair, clarification that false accusations will be addressed, creation of a stream-lined administrative process, and clarification of the appeals process. Dr. Mobley also provided information on changes that had been requested by the campus community but that had not been made. These included providing the victim with the right not to have the complaint investigated, allowing the parties to have legal representation during the hearing, and excluding off campus activity from the policy. The revised policy will be brought to the Board of Trustees (the AASL Committee and then the full Board) for approval in May. If approved, the website will be updated to include more resources. Education and training on the new policy will take place for all incoming students and new faculty and staff, and a user-friendly version of the policy will be developed. Prof. Russ said that the process for development of the policy had been open and transparent and thanked those who been involved. The Senate voted to endorse the sexual misconduct policy with three dissenting votes. *Attachment*

Wireless Health Graduate Certificates

Professor Gary Wnek, CSE, presented five proposed graduate certificates from the School of Engineering- San Diego. Two of the certificates are in the field of wireless health (wireless health product development and health information technology) and come on the heels of the wireless health certificate that was approved in 2011. The additional certificates are in the area of wearable computing (wearable computing, mobility-driven computing, and security in computing). The Senate voted to approve the graduate certificates. *Attachment*

MBA-MS in Biochemistry

Professor William Merrick presented the MBA-MS in Biochemistry. The Department of Biochemistry offers the MS in Biochemistry program that caters to college graduates. The program strengthens students' academic backgrounds prior to applying to medical school or graduate school and enriches their credentials for the job market. The Weatherhead School of Management offers the MBA program with its innovative approach to management education. The dual degree program will prepare students to participate in the fields of medical research and management and will give students an opportunity to develop expertise in their areas of substantive interest. No additional courses or resources are anticipated for the dual degree program. The Senate voted to approve the MBA-MS in Biochemistry. *Attachment*

MBA-MS in Medical Physiology

Professor Tom Nosek presented the MBA-MS in Medical Physiology. The Department of Physiology & Biophysics offers the MS in Medical Physiology program that caters to college graduates. The program strengthens the students' academic backgrounds prior to applying to medical school, dental school, graduate school, or other health professions programs and enriches their credentials for the job market. The Weatherhead School of Management offers the MBA program with its innovative approach to management education. The dual degree program will prepare students to participate in the fields of medical research and management and health care management, as well as give students an opportunity to develop expertise in areas of substantive interest. Dual degree students will be more likely to have greater job opportunities in the areas of translational science and business/health care. No additional courses or resources are anticipated to fulfill the respective schools' obligations in administering the dual degree program. The Senate voted to approve the MBA-MS in Medical Physiology. *Attachment*

Pearson Test of English Academic

Professor Mark De Guire, chair of FSCUE, presented information that had been prepared by Rick Bischoff, Vice President for Enrollment, on the Pearson Test of English Academic. FSCUE had approved adding the Pearson test as one of the English proficiency tests available to international undergraduate students seeking admission to CWRU. The university would continue to accept the TOEFL and IELTS tests and students would still be required to submit an ACT or SAT score. The Pearson test is accepted by over 1600 institutions in the US and by 75% of Ivy League schools. WSOM currently accepts the test for its MBA applicants. If the TOEFL score requirement increases, the Pearson test score requirement will increase to a commensurate level. The Senate voted to approve the Pearson Test of English Academic. *Attachment*

Extracurricular Life and Class Attendance Resolution

Prof. De Guire introduced the Extracurricular Life and Class Attendance Resolution endorsed by FSCUE. Lou Stark, Vice President for Student Affairs, provided additional information. The resolution had originated in the Student Life Subcommittee as a result of faculty concerns about students missing classes because of athletic events. The CAS Executive Committee had drafted a similar statement but the Subcommittee felt that the resolution should come from the Division of Student Affairs since the issue cuts across all schools. The resolution stresses the value of the student's total educational experience and provides that in a conflict situation, all parties (students, faculty and staff) should work together towards a resolution. This prevents a student from feeling as if he/she must negotiate

competing interests. If an appropriate accommodation cannot be reached, the student's obligation to attend class takes priority. A member of the Senate expressed discomfort with the amount of class time missed by student athletes. The Senate voted to endorse the resolution. *Attachment*

Non-UPF Course Review Protocol

Discussion of this topic was postponed to the fall due to insufficient time at the meeting.

Presentation of 2014-15 Executive Committee, Chairs and Members of Standing Committee

Professor Simon Peck, chair of the Senate Nominating Committee, presented slides listing the members of the 2014-15 Executive Committee and the chairs and members of the standing committees for 2014-15. The Senate voted to approve the members of the Executive Committee and standing committees. The chairs had been previously approved by the Executive Committee. *Attachment*

Summary of 2013-14 Senate Activities and Passing of the Gavel

Prof. Russ thanked the President and Provost for their support of shared governance within the university and also thanked the past chair of the Senate and the secretary of the University Faculty. Prof. Russ reviewed major accomplishments of the year and encouraged even better communication next year between the Senate and the college/schools. The gavel was passed to Professor Robert Savinell, vice-chair. President Snyder thanked Prof. Russ for stepping into the role of chair after the death of Professor Steve Garverick last fall. President Snyder announced that Prof. Russ has been named a Distinguished University Professor.

The meeting was adjourned at 5:40 p.m.

Approved by the Faculty Senate



Rebecca Weiss
Secretary of the University Faculty

Faculty Senate

FSFC Update

April 24, 2014

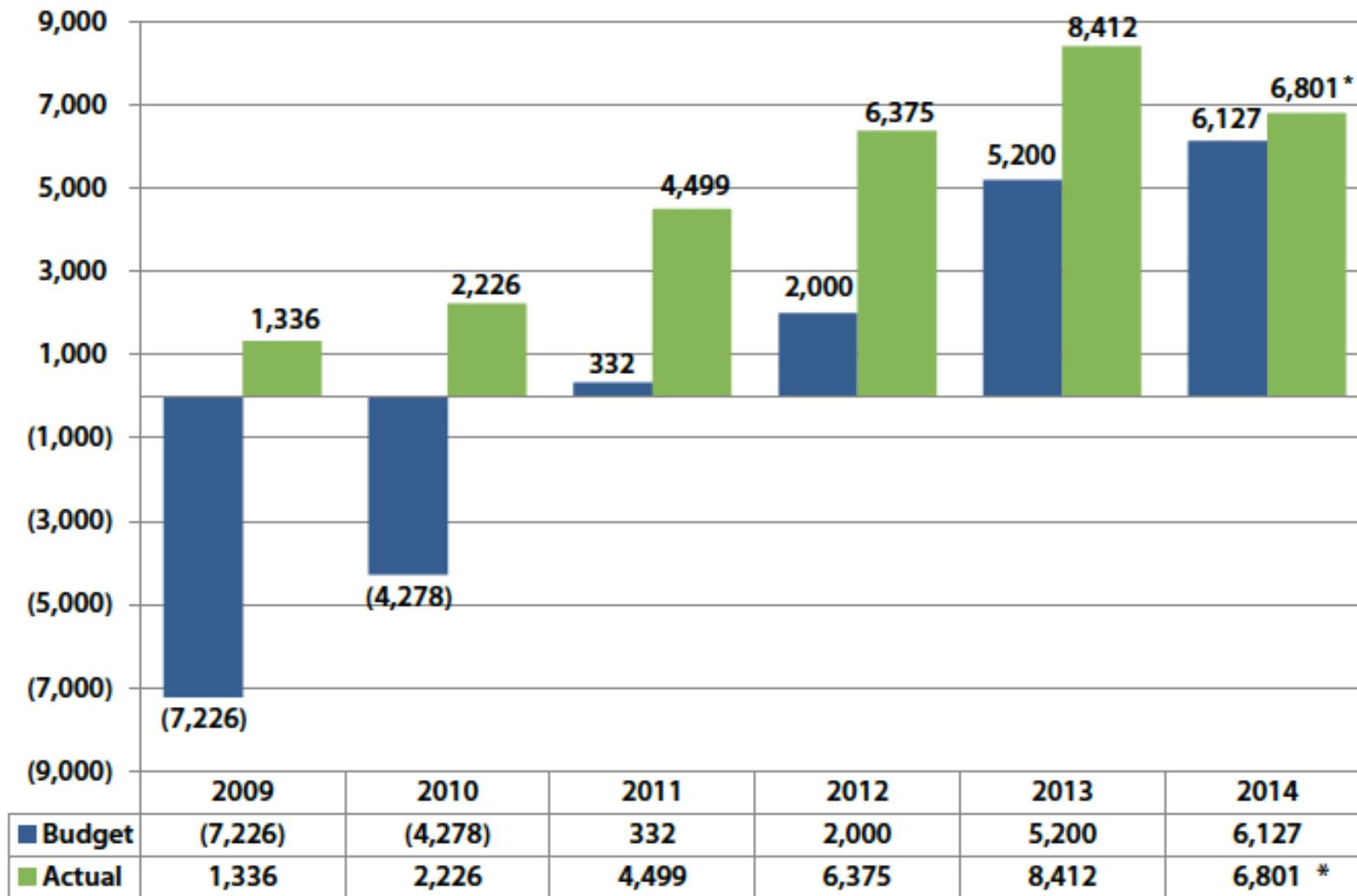
Professor Scott Fine

Weatherhead School of Management
Chair, Faculty Senate Finance Committee

Q2 OPERATING FORECAST AND FY 2015 BUDGET

University Surplus/(Deficit)

in thousands of dollars



* Q2 Forecast

2014 Q2 Operating Forecast – Key Take Aways

- University operating result is a projected \$6.8 M Surplus
 - Budgeted Surplus of \$6.1 M
 - \$3.6 M higher than 2014 Q1 Forecast
 - (\$1.6 M) lower than the 2013 Surplus of \$8.4 M
- Total Operating Revenue of \$1,019.3 M
 - \$4.7 M favorable to Budget
 - Other Income is \$5.6 M favorable to Budget
- Total Operating Expense of \$1,019.1 M
 - (\$5.2 M) unfavorable to Budget
- Operating Margin of \$0.2 M
 - (\$0.5 M) unfavorable to Budget

Summary of Operations by Management Center

2014 Q2 Forecast

| <i>In thousands of dollars</i> | Total Revenue | Total Expense | Operating Margin | Undergraduate Tuition Subvention | Use of Retained Surplus | Surplus/ (Deficit) |
|--------------------------------|---------------------|---------------------|------------------|----------------------------------|-------------------------|--------------------|
| CAS | \$ 103,535 | \$ 109,567 | \$ (6,032) | \$ 1,999 | \$ 4,033 | \$ - |
| CSE | 93,574 | 96,698 | (3,124) | 730 | - | (2,394) |
| WSOM | 50,489 | 51,228 | (739) | 343 | 396 | - |
| MSASS | 23,047 | 23,496 | (449) | 3 | 446 | - |
| LAW | 32,825 | 37,521 | (4,696) | 1 | 1,715 | (2,980) |
| DENT | 34,880 | 33,803 | 1,077 | 3 | - | 1,080 |
| NURS | 25,709 | 25,295 | 414 | 173 | - | 587 |
| CSOM | 464,548 | 464,291 | 257 | 80 | - | 337 |
| UGEN | 190,726 | 177,223 | 13,503 | (3,332) | - | 10,171 |
| OPERATING RESULT | \$ 1,019,333 | \$ 1,019,122 | \$ 211 | \$ - | \$ 6,590 | \$ 6,801 |

Management Center Financial Assessment

2014 Q2 Forecast

| | | |
|--------------|---------|--|
| CAS | Watch | Negative Operating Margin of (\$6.0 M); Forecast to break-even with \$2.0 M in subvention and the use of \$4.0 M in retained surplus |
| CSE | Watch | Negative Operating Margin of (\$3.1 M); Forecast Deficit of (\$2.4 M) with \$0.7 M in subvention |
| WSOM | Caution | Negative Operating Margin of (\$0.7 M); Forecast to break-even with \$0.3 M in subvention and the use of \$0.4 M in retained surplus |
| MSASS | Watch | Negative Operating Margin of (\$0.4 M); Forecast to break-even with the use of \$0.4 M in retained surplus |
| LAW | Watch | Negative Operating Margin of (\$4.7 M); Forecast Deficit of (\$3.0 M) with the use of \$1.7 M in retained surplus |
| DENT | Stable | Operating Margin and Surplus of \$1.1 M, \$0.1 M above Budget |
| NURS | Stable | Operating Margin of \$0.4 M; Forecast Surplus of \$0.6 M with \$0.2 M in subvention |
| CSOM | Caution | Operating Margin of \$0.2 M; Forecast Surplus of \$0.3 M with \$0.1 M in subvention |
| UGEN | Stable | Operating Margin of \$13.5 M; Forecast Surplus of \$10.2 M after subventing (\$3.3 M) |

FY 2015 BUDGET (PRELIM)

Fiscal Year 2015 Operating Budget

Projection as of February 14, 2014

| <i>in thousands of dollars</i> | 2013 Actual | 2014 Budget | 2015 Budget |
|--|---------------------|---------------------|---------------------|
| REVENUE | | | |
| Total Tuition | \$ 341,870 | \$ 363,920 | \$ 384,610 |
| Total Endowment | 82,865 | 89,341 | 90,165 |
| Total Other Revenue | 580,604 | 561,338 | 570,441 |
| TOTAL REVENUE | \$ 1,005,339 | \$ 1,014,599 | \$ 1,045,216 |
| EXPENSE | | | |
| Total Direct Salaries | \$ 241,480 | \$ 248,794 | \$ 251,282 |
| Other Direct Expense | 538,873 | 533,633 | 549,724 |
| Total Indirect Expense | 222,814 | 231,448 | 238,975 |
| TOTAL EXPENSE | \$ 1,003,167 | \$ 1,013,875 | \$ 1,039,981 |
| OPERATING MARGIN | \$ 2,172 | \$ 724 | \$ 5,235 |
| Use of Retained Surplus/Encumbered Funds | 6,240 | 5,403 | 1,508 |
| SURPLUS/(DEFICIT) | \$ 8,412 | \$ 6,127 | \$ 6,743 |

Guidelines and Projections (as compared to FY14)

REVENUE

Undergraduate tuition rate

3.25% increase

Undergraduate enrollment

First-year: 1,250, Continuing: 3,424 (Fall headcount)

Graduate tuition rate

3.25% increase

Professional tuition rate

Determined by each school

Endowment payout

0.0% increase except for new gifts: \$61.0M

Research & Training revenue

Determined by each school

Federal Overhead Recovery rate

58.5% as negotiated with HHS

Other Income

Determined by each school

Guidelines and Projections (as compared to FY14)

EXPENSE

| | |
|----------------------------------|---|
| Salaries | 1.0% pool + promotional/equity increases for UGEN and schools w/negative margin 2.0% pool + promotion/equity increases for schools w/positive margin |
| Fringe benefits | Federal rate: 28.5 % (<i>not final</i>); Non-federal rate: 31.5 % |
| Undergraduate Student Aid | 49.1% total, unfunded 44.9 %, funded 4.2 %. |
| Grad/Professional Student Aid | Determined by each school |
| Indirect expenses | 3.3% total increase; 1.0% salary, 0.0% non-salary, and \$4.8M program additions |
| Undergraduate tuition subvention | final year |
| SURPLUS/(DEFICIT) | target discussed separately with each school |

CAPITAL BUDGET

FY 2014 Capital Budget - Schedule of Sources and Uses

in thousands of dollars

| | <i>Ref.</i> | Special Funded | Working Capital Funded | TOTAL |
|--|-------------|------------------|---------------------------|--------------------|
| SOURCES | | | | |
| Depreciation (per GAAP) | | \$ - | \$ 62,000 | \$ 62,000 |
| Philanthropy for Veale Student Center | <i>a</i> | 5,027 | - | 5,027 |
| Philanthropy for Performing Arts Center (Temple) | <i>b</i> | 1,075 | - | 1,075 |
| Philanthropy for ThinkBox | <i>c</i> | 250 | - | 250 |
| Philanthropy for Wyant Athletics & Wellness Center | <i>d</i> | 6,333 | - | 6,333 |
| Philanthropy for Medical Education Building | | - | - | - |
| Philanthropy for Linsalata Alumni Center | <i>e</i> | 250 | - | 250 |
| Philanthropy for MSASS Renovation | <i>f</i> | 626 | - | 626 |
| Dental Reserves & Endowments for Strategic Projects | | - | - | - |
| Commercial paper - bridge financing | <i>a</i> | 27,235 | - | 27,235 |
| Endowments | | - | - | - |
| Auxiliary Operations | <i>g</i> | 3,131 | - | 3,131 |
| Auxiliary Prior Years' Surpluses and Funded Reserves | <i>g</i> | 2,488 | - | 2,488 |
| | | \$ 46,415 | \$ 62,000 | \$ 108,415 |
| REQUIREMENTS | | | | |
| I. Debt Retirement Fund | | \$ - | \$ (20,000) | \$ (20,000) |
| Principal Payments, External Debt | | - | (11,655) | (11,655) |
| Recognition of Internal Loan Debt Principal Payments | | - | (6,013) | (6,013) |
| TOTAL OTHER REVENUE | | \$ - | \$ (37,668) | \$ (37,668) |
| NET AVAILABLE SOURCES | | \$ 46,415 | \$ 24,332 | \$ 70,747 |

FY 2014 Capital Budget - Schedule of Sources and Uses

in thousands of dollars

| | Ref. | Special Funded | Working Capital Funded | TOTAL |
|--|----------|--------------------|------------------------|--------------------|
| USES | | | | |
| STRATEGIC CAPITAL PROJECTS | | | | |
| II. | | | | |
| Veale Student Center | <i>a</i> | \$ (32,262) | \$ - | \$ (32,262) |
| Performing Arts Center (Temple) | <i>b</i> | (1,075) | - | (1,075) |
| Dental School Projects | | - | - | - |
| ThinkBox | <i>c</i> | (250) | - | (250) |
| Wyant Athletics & Wellness Center | <i>d</i> | (6,333) | - | (6,333) |
| Medical Education Building | | - | - | - |
| Linsalata Alumni Center | <i>e</i> | (250) | - | (250) |
| MSASS Renovation | <i>f</i> | (626) | - | (626) |
| SUBTOTAL | | \$ (40,796) | \$ - | \$ (40,796) |
| PROVOST CAPITAL PROJECTS | | | | |
| III. | | | | |
| Undergraduate CSE Labs | | \$ - | \$ (750) | \$ (750) |
| CAS Faculty Retention | | - | (250) | (250) |
| Library Book Acquisition | | - | (4,400) | (4,400) |
| School and UGEN Based Equipment | | - | (5,000) | (5,000) |
| SUBTOTAL | | \$ - | \$ (10,400) | \$ (10,400) |
| FACILITIES & OTHER PROJECTS | | | | |
| IV. | | | | |
| Facility Improvement & Renovation | | \$ - | \$ (5,630) | \$ (5,630) |
| Other Projects | | - | (800) | (800) |
| SUBTOTAL | | \$ - | \$ (6,430) | \$ (6,430) |
| IT CAPITAL EXPENDITURES | | | | |
| V. | | | | |
| Network Refresh | | \$ - | \$ (1,726) | \$ (1,726) |
| Classroom Design | | - | (1,075) | (1,075) |
| University-Wide | | - | (2,693) | (2,693) |
| SUBTOTAL | | \$ - | \$ (5,494) | \$ (5,494) |
| AUXILIARIES | | | | |
| VI. | | | | |
| Campus Services | | \$ - | \$ (1,371) | \$ (1,371) |
| Campus Services - Auxiliaries | <i>g</i> | (2,919) | - | (2,919) |
| Housing | <i>g</i> | (2,700) | - | (2,700) |
| SUBTOTAL | | \$ (5,619) | \$ (1,371) | \$ (6,990) |
| TOTAL USES | | \$ (46,415) | \$ (23,695) | \$ (70,110) |
| BALANCE | | \$ - | \$ 637 | \$ 637 |

Strategic Project Capital Expenditures

FY 2012 – FY 2017 & Beyond

in thousands of dollars

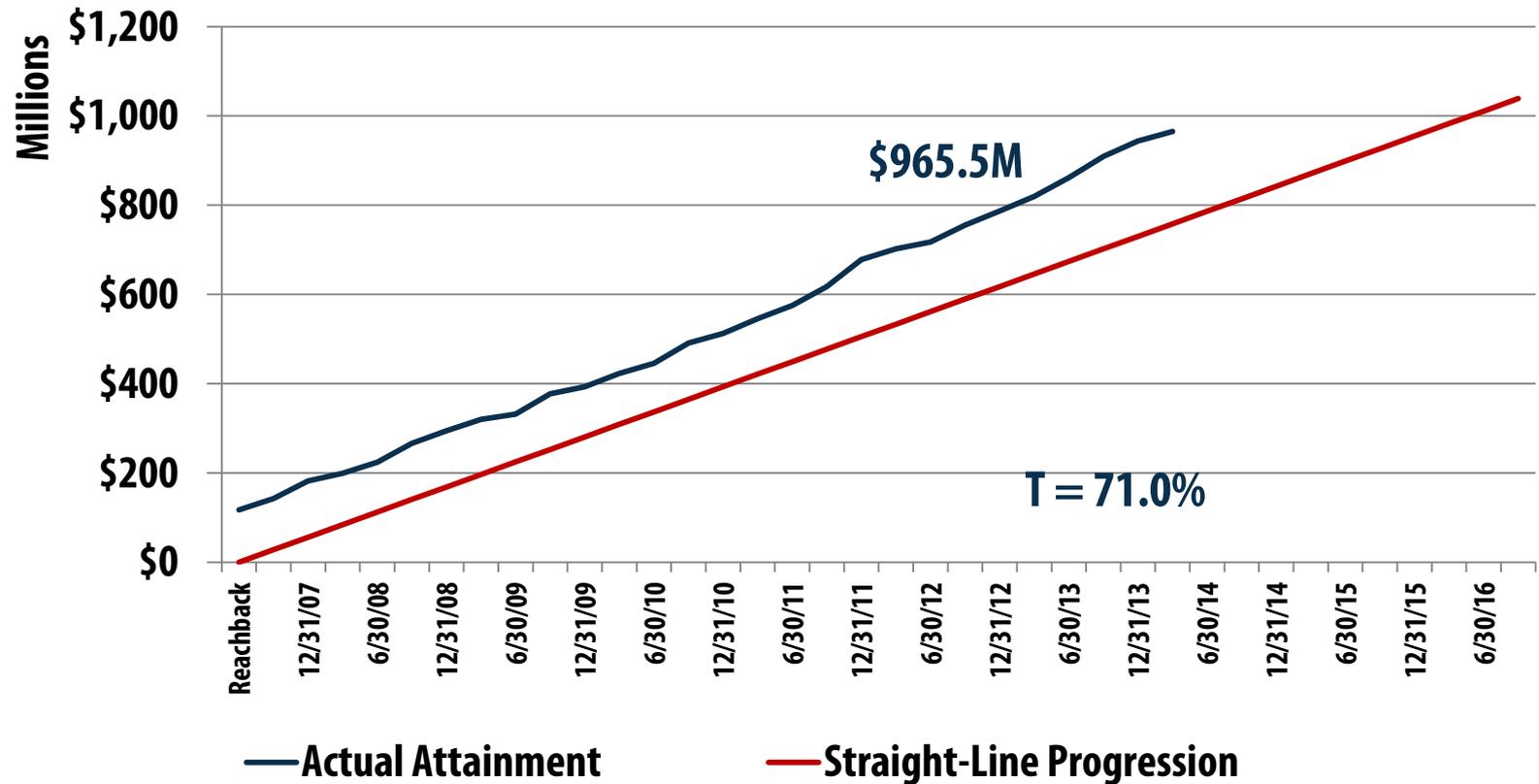
| | <u>Total Project Cost</u> | <u>FY 2013 and prior</u> | <u>FY 2014 Budget</u> | <u>FY 2015 Budget</u> | <u>FY 2016 Budget</u> | <u>FY 2017 and beyond</u> |
|---|---------------------------|--------------------------|-----------------------|-----------------------|-----------------------|---------------------------|
| <u>Project:</u> | | | | | | |
| The T. Veale University Center | \$ 52,617 | \$ 14,373 | \$ 32,262 | \$ 470 | \$ 400 | \$ 1,173 |
| The Performing Arts Center at the Temple* | 62,700 | 7,390 | 2,779 | 25,659 | 11,448 | 15,423 |
| Dental School | 17,300 | 749 | - | - | - | - |
| ThinkBox | 10,600 | 75 | 250 | 9,000 | 1,275 | - |
| Wyant Athletics & Wellness Center | 8,800 | 267 | 6,333 | 2,200 | - | - |
| Medical Education Building | - | - | - | - | - | - |
| Linsalata Alumni Center | 5,000 | - | 250 | 3,500 | 1,250 | - |
| MSASS Renovation | 5,104 | 30 | 626 | 2,698 | 1,750 | - |
| | \$ 162,121 | \$ 22,884 | \$ 42,500 | \$ 43,527 | \$ 16,123 | \$ 16,596 |

* Updated at February Trustees meeting

CAPITAL CAMPAIGN UPDATE

Campaign Attainment Toward Goal

March 2014



Impact of Forward Thinking

\$144.3M in new **STUDENT SUPPORT**
compared to \$82.6 million (FY2002-FY2007)

Over 50 Professorships in **FACULTY SUPPORT**

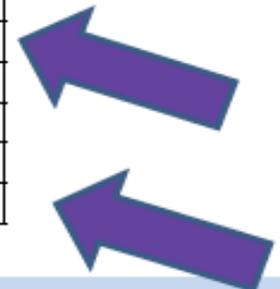
Have been either completed or started during our campaign

\$340.9M in total **ENDOWMENT**
compared to \$118.3 million (FY2002-FY2007)

ENDOWMENT

“Intergenerational Equity” Worries Surfaced in 2010 and 2011

| <i>FY</i> | <i>Pool Beginning Market Value in \$ Mln</i> | <i>Approved Maximum Base Spending in \$ Mln</i> | <i>Approved Development Support in \$ Mln</i> | <i>Approved Total Spending in \$ Mln</i> | <i>Total Spending as % of Market Value at Beg of FY</i> |
|-----------|--|---|---|--|---|
| 2007 | 1,245 | 61.2 | 5.3 | 66.5 | 5.3% |
| 2008 | 1,446 | 65.1 | 5.8 | 71.0 | 4.9 |
| 2009 | 1,420 | 69.4 | 7.9 | 77.3 | 5.4 |
| 2010 | 1,143 | 67.5 | 7.9 | 75.4 | 6.6 |
| 2011 | 1,169 | 65.1 | 7.9 | 73.0 | 6.3 |
| 2012 | 1,358 | 63.9 | 7.9 | 71.8 | 5.3 |
| 2013 | 1,257 | 64.9 | 6.9 | 71.5 | 5.7 |
| 2014 | 1,314 | 61.0 | 6.5 | 67.5 | 5.2 |



By 2013, we took action to “override” spending dollars for FY14 of \$66 mln calculated by formula and reduce to \$61 mln

QUESTIONS

Options for Expanding LGBT, Adoption, & IVF Benefits

Office of Human Resources
Presentation to Faculty Senate
April 24, 2014

Requested Additions

1. Transgender-related health coverage for faculty and staff
2. Subsidy to defray tax costs of domestic partner benefits
3. Financial assistance for adoptions
4. Financial assistance for IVF

Benefits at CWRU

1. We are self insured

The institution must cover the cost of all claims. These funds come from the operating budget, premiums, copays and deductibles.

Benefits at CWRU

2. Every benefit decision – additions, deletions, or changes designed to influence health behaviors – directly affects the costs that the university and plan participants pay.

Requested Additions

1. Transgender-related health coverage for faculty and staff
2. Subsidy to defray tax costs of domestic partner benefits

Context

1972: Gay Activist Alliance Launched

1987: LGSU Recognized

1988: Board of Trustees Adds “Sexual Orientation” to nondiscrimination clause

1999: University offers domestic partner benefits

2006: *The Advocate* names CWRU one of nation’s best colleges for LGBT students

Context

- 2008:** University adds tuition benefits for dependents of domestic partners
- 2009:** First LGBT Alumni Reunion
- 2010:** Safe Zone Program Launched
- 2010:** University Opens LGBT Center in Thwing
- 2013:** University Adds Transgender Policies for Students
- 2013:** CWRU Named To Campus Pride's Top 25

1. Transgender Coverage: Benchmarks

11 of 36 AAU schools reviewed offer coverage:

| Surgery | Hormone Replacement | Lifetime Limit |
|---|--|---|
| Cornell Harvard Northwestern Rice University of Michigan University of Pennsylvania University of Minnesota Yale | Harvard MIT Northwestern Penn State Rice University of Michigan University of Pennsylvania Yale | University of California System (\$75,000) |

1. Transgender Coverage: Expense

| | |
|---------------------------|----------------|
| Initial Counseling: | \$1K - \$5K+ |
| Hormone Replacement: | \$0.3K - \$2K+ |
| Surgery & Follow-Up Care: | \$34K - \$65K+ |

TOTAL Annual Cost* \$35K - \$72K+

- Estimated annual costs for an individual receiving services (non cosmetic)
- Estimated annual cost for group our size \$1.2k-\$150k

Likely use: 1 per 4 years
(based on information from other institutions)

2. Tax Cost Subsidy: Context

In August, 2013, the IRS announced that in states where gay marriage is recognized legally, such unions will be treated as legal marriages for federal tax purposes. To date 17 states legally recognize gay marriage.

*Despite recent federal judicial developments, Ohio is **not** one of those states.*

2. Tax Cost Subsidy: Benchmarks

1 of 26 AAU schools in states where gay marriage is not legally recognized provide subsidies to cover the tax implications of domestic partner benefits

**University of Pennsylvania:
Up to \$125 per month**

2. Tax Cost Subsidy: Expense

- 56 employees registered with CWRU as a member of a domestic partnership
- 40 of those employees have partners covered through their benefits
- 16 of those employees have partners and dependents covered through their benefits

Estimated cost of subsidy for one year: \$200K-\$350K

2. Tax Cost Subsidy: Decisions

Decision points if adopting a subsidy:

| Who Receives Subsidy | Taxable Benefits | Tax Jurisdiction | Method |
|--|---------------------|-----------------------------|----------------------------|
| Employees with: <ul style="list-style-type: none">• Same Sex Spouse?• Same Sex DP?• Opposite Sex DP? | Medical? Dental? | Federal? Ohio? Local? | Tax Rate? Fixed Amount? |

Requested Additions

3. Financial assistance for adoptions
4. Financial assistance for IVF

3. Adoption Assistance: Benchmarks

14 of 56 AAU schools reviewed reimburse expenses

| Per Adoption | Lifetime Limits |
|--|---|
| <p>Up to \$1,500 – University of Illinois*</p> <p>Up to \$2,500 – Johns Hopkins*</p> <p>Up to \$3,000 – Vanderbilt</p> <p>Up to \$5,000 – Columbia, Cornell*, Emory, Harvard, MIT, NYU, Ohio State, University of Chicago, University of Pennsylvania</p> <p>Up to \$10,000 – University of California (Berkeley), Yale</p> | <p>2 adoptions per employee - Vanderbilt</p> <p>3 adoptions per family - Cornell</p> <p>\$10,000 – University of Chicago</p> <p>\$20,000 – MIT</p> <p><i>* Other Conditions Apply</i></p> |

3. Adoption Assistance: Expense

No definitive data re frequency of adoption
(the addition of dependents through HR does not require the employee to specify how the individual has come into the family)

Cost varies based on approach:

- Per adoption
- Lifetime limit
- Sliding scale

(based on compensation)

4. IVF Assistance: Benchmarks

14 of 36 AAU schools reviewed cover

| | |
|------------|-------------------------|
| | |
| Boston | Johns Hopkins |
| Brown | MIT |
| Columbia | Northwestern |
| Cornell | Ohio State |
| Duke | University of Chicago |
| Harvard | University of Iowa |
| Iowa State | University of Minnesota |

4. IVF Assistance: Benchmarks

Limits on Coverage: 5 have none. Others:

- **Per year benefit limits** – Columbia, University of Minnesota
- **Lifetime benefit limits (\$)** – Cornell, Iowa State, Johns Hopkins, Ohio State, University of Iowa
- **Lifetime benefit limits (treatment cycles)** - Northwestern
- **Facility restrictions** – Duke, Johns Hopkins

4. IVF Assistance: Expense

Again, varies depending on whether limits applied and, if so, nature of those limits

Estimated costs per cycle: \$12K to \$20K
Estimated utilization: as many as 7 claimants

Note: HealthSpan (formerly known as Kaiser) does not offer IVF coverage

Recap

1. Transgender
2. “Grossing up”
3. Adoption
4. IVF

Potential Next Steps

1. Pursue all options for simultaneous implementation January 1, 2015
2. Pursue all options yet implement sequentially – in what order?
3. Pursue select option(s) – which ones?
4. Other?

Thank You

Questions? Comments?

**CWRU Health Insurance Equity:
Ethical Treatment of All Faculty and Staff Members**

Prepared by: CWRU LGBTQA Committee

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Director, LGBT Center
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Current Problematic

1. The CWRU Lesbian, Gay, Bisexual, Transgender and Allies Committee has presented proposals and suggestions for policy change regarding health care equity for the LGBT community on multiple occasions. These proposals concerned two main issues: transgender-related health care coverage for non-students (faculty, staff) and equity of coverage costs for same-sex domestic partners on a par with the costs of married couples (often referred to as “grossing-up”).
 - a. The *response* to the proposal has been to approach these issues from a fiscal perspective rather than from a perspective of dignity, equity and inclusion for all faculty/staff.
 - b. Human Resources has indicated that the request for LGBT health care equity has been tabled for further review. No time frame for review has been provided.
 - c. To date, there has been no *process* for including LGBT faculty/staff representation during discussions of LGBT health care equity.

Proposal: substantive commitments

2. We propose the following *substantive* changes for CWRU so that it lives up to its own ethical background, national and universal backgrounds of equality, and so that it does not degrade the value of any individual:
 - a. Provide transgender-related health care coverage to CWRU faculty and staff.
 - b. Establish a means to equitably manage taxation of domestic partner benefits.

Proposal: procedural commitments

3. We propose the following *procedural* changes for CWRU so that *in a pragmatic way* it can move intentionally and regularly toward substantive goals:
 - a. Provide LGBT faculty and staff representation during discussions of LGBT health care equity.
 - b. Establish a working time frame for implementing health care equity for LGBT faculty and staff.

Background Focus: A Matter of Dignity

4. At the heart of the universal, national, and campus ethical commitments is the importance of *respect for the dignity of persons*. Health care inequity is a *degrading* structural condition that singles out, by omission, the dignity of some groups of individuals and refuses to recognize it in practice. This is unethical and *corrosive of community*. It is a matter that cannot be reduced to a mere calculus of costs and benefits, because it concerns *intrinsic* values.

Campus Background

5. Case Western Reserve University is committed to equity in numerous ways.
 - a. The mission of CWRU states: "Case Western Reserve University improves people's lives through preeminent research, education and creative endeavor. We realize this goal through... promotion of an inclusive culture of global citizenship."
 - b. The core values of CWRU include: "Inclusiveness and Diversity... through appreciation for the perspectives and talents of each individual; Integrity and Transparency... through ethical behavior...."
 - c. Goal 2 of the CWRU strategic plan states: "Promote Diversity—Enfranchise underrepresented groups, maximizing the richness of culture, and perspectives within the campus community."
 - d. The Affirmative Action and Equal Employment Opportunity policy of CWRU states: "Case Western Reserve University does not discriminate in recruitment, employment, or policy administration on the basis of race, religion, age, sex, color, disability, sexual orientation or gender identity or expression, national or ethnic origin, political affiliation, or status as a disabled veteran or other protected veteran under U.S. federal law. In addition, the university expects all employees, students, vendors, and associates to comply with the policy of non-discrimination." (http://www.case.edu/finadmin/humres/policies/standards/aa_eeo.html)
 - e. President Snyder has stated: "As an academic institution, Case Western Reserve is committed to expanding knowledge and understanding. Realizing these goals demands that we welcome and celebrate a broad range of perspectives, recognizing that all of us have lessons we can teach one another.
Every single member of our community is important, and each of us should strive to ensure our actions convey that message. Tolerance and respect are essential to our mission. We value the contributions of every student, staff and faculty member, regardless of race, ethnicity, religion, political persuasion, sexual orientation or gender identity.
Our classrooms, laboratories, residence halls and other settings should be free of discrimination, to be sure, but that is not enough. We must recognize that we are fortunate to study and work in an environment where it is understood that our differences add to the richness of our learning. It is only from a wide array of experiences and insights that we together can achieve deeper appreciation and awareness of some of the greatest societal challenges of our time." (<http://www.cwru.edu/lgbt/policy/president.html>)

Inequitable Tax Burden for CWRU Employees in Same-Gender Relationships:

A Grossing Up Proposal for CWRU

Introduction

CWRU Policy Regarding Taxation of Partner and Spousal Benefits:

Currently, employees at CWRU are able to add both different gender and same gender partners and spouses to their health benefit plans. The contribution that CWRU makes to pay for **legally married spouses** is considered a “pre-tax” benefit. As such, employees with spouses who are **legally recognized** by the state and/or federal government are not taxed on those benefits. However, in order for these benefits to be considered “pre-tax” the federal and state government must recognize the marriage as legal and valid, otherwise the benefits paid to the employee are taxed by the federal and state government.

Federal and Ohio Recognition of Same-Gender Marriage:

In June 2013 the United State Supreme Court struck down Section 3 of the Federal Defense of Marriage Act (DOMA) which, up until removal, maintained that only marriages between a man and woman could be legally recognized by the federal government. In August 2013 the IRS released guidelines that outlined the changes due to the repeal of the Federal DOMA. The **federal government** now recognizes *all* same gender marriages, performed in a state in which same gender marriage is legal. The **state of Ohio** *does not* recognize any marriage between two people of the same gender, even when that marriage was legally performed within a state that does support same-sex marriages.

Implications for CWRU Employees:

Although CWRU offers same-gender partner health insurance benefits for same-gender couples, the reality of the benefit is financially inequitable. When a CWRU employee adds a partner or spouse to their health insurance, the money that the university pays for that health benefit may be viewed as taxable income by the Federal and/or state government. Employees with a same gender partner, regardless of their marital status, will always be taxed on the benefit at the state level and, depending whether they are legally married, many will also be taxed at the federal level, as well.

The state and federal taxation of the health insurance benefit creates an additional tax burden for CWRU employees who are in same-gender marriages and same-gender non-married domestic partnerships. It is considered best practice for institutions to calculate the tax and “gross-up” the employee’s annual wage to create a truly equitable benefit.

Financial Impact on CWRU Employees in Same-Gender Relationships

State Taxes:

- The benefits that same-sex partners receive from CWRU are all taxable (imputed income) at the state level. This is because the state of Ohio does not recognize same-sex marriage, even when it was legally performed outside of Ohio. CWRU should “gross-up” the calculated added state tax burden to create an equitable benefit.

Federal Taxes:

- The benefits that same-sex, non-married partners receive from CWRU are taxable (imputed income) at the federal level. CWRU should “gross-up” the calculated federal tax burden to create an equitable benefit. Same-sex marriage is not legal in Ohio, therefore in order for a same-sex couple to become married they have to leave the state of Ohio. Also, Ohio does not allow same-sex divorce. Many people who live in Ohio are unable to divorce a former spouse and therefore are unable to legally remarry.
- The IRS now recognizes all same-sex marriages as legal marriages, regardless of the state of residency. As such, employees who are in legally married in a state outside of Ohio do not pay additional taxes on the benefits they receive for their spouses. Grossing up is not necessary at the federal level for these employees.

Further Information:

<http://www.hrc.org/resources/entry/taxation-of-domestic-partner-benefits>

Imputed income: the estimated value of the employer's financial contribution towards health insurance coverage for non-dependent same-sex partners must be reported as taxable wages earned.

- **Employees:** This tax penalty, depending on the individual and the estimated value of the health benefit, can be in the thousands of dollars per year and can result in the individual paying upwards of 50% more in federal taxes. As of 2007, **employees with partner benefits pay on average \$1,069 per year more in taxes** than would an employee with the same coverage for a different-sex spouse. See the Williams Institute and Center for American Progress report: Unequal Taxes on Equal Benefits.

| Employee Group (all who have added a spouse or partner to CWRU insurance) | Additional tax burden from the state of OHIO? | Additional tax burden from the FEDERAL Government? | Recommended Grossing Up to offset additional State tax? | Recommended Grossing Up to offset additional Federal taxes? |
|--|---|--|---|---|
| Non married-same-gender domestic partnership | YES | YES | YES | YES |
| Non married-Different-gender domestic partnership | YES | YES | NO | NO |
| Married-Same-gender relationship | YES | NO | YES | N/A |
| Married-Different-gender relationship | NO | NO | N/A | N/A |

Health Insurance Coverage for Transgender Related Healthcare:

Introduction, Impact and Recommendations for CWRU

Prepared by: Liz Roccoforte, Director, CWRU LGBT Center

Definitions:

Transgender: An umbrella term that refers to a broad range of gender identities and gender expressions. Basically, the term transgender refers to many identities and expressions that fall outside the “traditional” norms of gender. This is not a diagnostic term, and does not imply a medical or psychological condition. (adapted from <http://transhealth.ucsf.edu>)

Transsexual : Transsexual is one of the gender identities that falls underneath the broader category of “transgender.” This term most often applies to individuals who seek hormonal (and often, but not always) surgical treatment to modify their bodies so they may live full time as members of the sex category opposite to their birth-assigned sex. (adapted from <http://transhealth.ucsf.edu>)

Introduction:

“Transgender Related Health Care” refers to medical benefits relating to transgender individuals. Generally, this care refers to the coverage of procedures, surgeries and hormones associated with medical gender transition. Often, individuals seeking this kind of healthcare identify as transsexual. However, not all people seeking this care identify specifically as transsexual, but still meet the criteria for transition related care, therefore the broader term “transgender” is often used instead of “transsexual.” This health care coverage also refers to the coverage of healthcare needs that are not directly related to medical gender transition, but impacted by it.

Currently, all CWRU employee health care plans explicitly exclude transgender related health care as a covered benefit.

- Specifically, current employees seeking coverage for medical procedures, visits and pharmaceuticals, required for medical gender transition, are denied coverage by insurance.
- Additionally, due to the specific exclusions, employees who have already transitioned may be denied care for routine, non-transition related care, simply because they are identified as transgender.

Specific Language of Transgender Health Care Exclusions from CWRU's Health Care Plans (2013):

Anthem PPO Plans 1&2:

Exclusion # 51. Services and supplies related to sex transformation and/or the reversal thereof, or male or female sexual or erectile dysfunctions or inadequacies, regardless of origin or cause. This Exclusion includes sexual therapy and counseling. This exclusion also includes penile prostheses or implants and vascular or artificial reconstruction, Prescription Drugs, and all other procedures and equipment developed for or used in the treatment of impotency, and all related Diagnostic Testing.

Kaiser HMO:

Certificate of coverage unavailable from the Benefits website. Based on previous research, the Kaiser plan also excludes coverage.

Medical Mutual SuperMed Plus Plans 1&2:

Exclusion #30: For transsexual Surgery or any treatment leading to or in connection with transsexual Surgery.

Anthem High Deductible Plan:

Exclusion #53 Services and supplies related to sex transformation and/or the reversal thereof, or male or female sexual or erectile dysfunctions or inadequacies, regardless of origin or cause. This Exclusion includes sexual therapy and counseling. This exclusion also includes penile prostheses or implants and vascular or artificial reconstruction, Prescription Drugs, and all other procedures and equipment developed for or used in the treatment of impotency, and all related Diagnostic Testing.

Relevant information:

- Transgender health care is now a covered benefit for CWRU students through the student medical plan at CWRU. The coverage covers a broad range of treatments including hormones, surgeries and mental health care up to \$50,000.00 per year.
- Over 26 universities and colleges now provide health care coverage for transgender related health care for their employees.
- The most well respected and mainstream medical and mental health organizations and associations recognize the necessity of medical treatment for the diagnosis associated with transgender identities (“Gender Dysphoria” in the DSM V) and understand the health care associated with treatment as “medical necessary.”

National Support for Coverage of Transgender Related Health Care:

- American Medical Association Resolution: Removing Financial Barriers to Care for Transgender Patients:

“An established body of medical research demonstrates the effectiveness and medical necessity of mental health care, hormone therapy and sex reassignment surgery as forms of therapeutic treatment for many people diagnosed with GID ... Therefore, be it RESOLVED, that the AMA supports public and private health insurance coverage for treatment of gender identity disorder.”*

(<http://www.ama-assn.org/resources/doc/hod/a08resolutions.pdf> , 2008 Resolution 122)

*GID refers to “Gender Identity Disorder” in the 4th Edition of Diagnostic Statistical (DSM) Manual. The 5th edition of the DSM changed the diagnoses from “Gender Identity Disorder” to “Gender Dysphoria.”

- Other organizations that have adopted the similar resolutions regarding the inclusion of transgender related health care benefits:
 - American Psychological Association
 - American Academy of Family Physicians
 - National Association of Social Workers
 - American Public Health Association
 - American College of Obstetricians and Gynecologists
 - World Professional Association for Transgender Health
 - National Commission on Correctional Health Care
- The American Medical Association (AMA) has underscored the negative health outcomes caused by delays in treatment. Noting that much transition-related care involves services usually covered for other diagnoses (e.g., mastectomy or breast reconstruction, hysterectomy, and other reconstructive surgeries), the AMA called coverage denials based on a Gender Identity Disorder diagnosis “discrimination.”

Recommendation:

Inclusive healthcare for transgender individuals is considered both a “best practice,” and medically necessary. The inclusion of transgender related healthcare benefits reflect CWRU’s commitment to inclusivity, respect and individual dignity. These benefits are in alignment with our non-discrimination policy which protects employees from discrimination on the basis of gender identity and gender expression.

It is recommended that CWRU:

- 1) Remove all specific exclusions relating to transgender health care from its insurance policies
- 2) Offer health care coverage of medically necessary treatment including coverage for hormones, mental health care and surgeries relating to medical gender transition.

Please see attached documents for data regarding utilization of benefits and estimated cost.

SEXUAL MISCONDUCT INTERIM POLICY

Case Western Reserve University

Table of Contents

Introduction

Definition and Examples

- Non-Consensual Sexual Contact

- Forced Sexual Activities

- Non-Consensual Sexual Intercourse

- Forced Sexual Intercourse

- Sexual Harassment

 - Sexual Harassment Examples

 - Relationships Involving Authority or Power

 - Intention vs. Impact

 - Academic Freedom

Consent and/or Unwelcome Behavior

- Definition of Consent

- Definition of Unwelcome Behavior

Reporting

- Designated Reporting and Confidential Support Resource

- Role of Designated Reporting Representatives

Role of Confidential Support Resources

Anonymous Reports

Confidentiality

Retaliation

Responsibilities of the University Community

- Cooperating with Investigations

- Police Responsibility

- Support of Witnesses and Bystanders

Investigative Responsibilities

- University's Responsibility

- Interim University Action

Notifications

- Parental/Legal guardian/Partner Notification

- Campus Notification

- Campus Crime Reporting

Student, Faculty & Staff Sexual Misconduct Complaint Process (flow chart)

University Complaint Processes

- Initial Inquiry

- Rights Under the Informal and Formal Processes

Informal Process

- Informal Process Steps

 - Potential Informal Actions

- Complaints by the University

- Formal Process

 - Determination of Administrative Hearing vs. Board Hearing

 - Formal Process: Administrative Hearing

 - Administrative Hearing Procedure

 - Administrative Hearing Appeal Process

Comment [CGT1]: Page numbers to be inserted here

Formal Process: University Community Standards Board
Pre-Hearing Procedure
Hearing Procedure
Report of Findings
Appeal Process

False Allegations
Support Resources
Alternative Housing & Academic Accommodations
Counseling
Emergency Room Examination/Preservation of Evidence
University Health Services
Retention of Documents
 Informal Complaints
 Formal Complaints
Annual Report
Appendix A

ACKNOWLEDGEMENT

Significant portions of this policy have been adapted from the [National Center for Higher Education Risk Management Group, LLC \(NCHERM\) Model Title IX Compliance Policy, Grievance Process and Civil Rights Investigation Protocol \(2014\)](#) and are used as permitted by NCHERM.

Introduction

Case Western Reserve University is a community based upon trust and respect for its constituent members. Sexual misconduct is a violation of that trust and respect and will not be tolerated. Members of the Case Western Reserve community, guests and visitors have the right to be free from sexual misconduct. All members of the community are expected to conduct themselves in a manner that does not infringe upon the rights of others. The purpose of this policy is to define sexual misconduct and the procedures the university uses to investigate and take appropriate action on complaints of sexual misconduct. When complaints are reported, the university will act to end the discrimination, prevent its recurrence, and remedy the effects on both individuals and the university community. This policy and the accompanying procedures shall serve as the only internal university forum of resolution and appeal of sexual misconduct complaints.

This policy applies to all members of the university community including all students, Post-Doctoral Fellows and Post-Doctoral Scholars, faculty, staff ([including administrators](#)), and other university officials, whether full or part-time, and guest lecturers, volunteers, contractors and visitors. [This Policy is applicable to a student on the date on which the student accepts admission to the University.](#)

This policy governs university-sponsored activities occurring both on and off university property and applies to non-university sponsored or related events that occur off university property that may have a demonstrable and significant disruptive impact on a university community member or on the campus. The work or educational environment includes, but is not limited to: offices, classrooms and clinical settings; residence halls and Greek Houses; on-campus or off-campus interactions between university community members, whether personal or virtual; and all university-sponsored activities, programs, or events (including off-campus activities such as international travel programs).

Sexual misconduct may involve the behavior of a person(s) regardless of the person's gender identity or expression against a person(s) of the opposite or same gender or against a person who is transsexual or transgender.

The university does not discriminate on the basis of sex in its educational program and in other activities operated by the university and is required by Title IX, and specifically 34 C.F.R. Part 106.9, as well as Title VII, not to discriminate in such a manner. This extends to employees of and applicants for employment or admission to the university. Inquiries concerning the application of Title IX may be directed to the Title IX Coordinator for the university or to the Assistant Secretary for the Office of Civil Rights of the Department of Education.

The Title IX Coordinator is:

Dr. Marilyn Mobley
Vice President, Office of Inclusion, Diversity and Equal Opportunity
Adelbert Hall 315
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-8877
msm73@case.edu

The role, names and contact information for the Title IX Coordinator, Deputy Title IX Coordinators and Investigators are listed in Appendix A, along with contact information for the Office of Civil Rights of the Department of Education.

Complaints of other forms of gender discrimination that do not meet the definition of sexual misconduct will be addressed via existing university policies and procedures. See

www.case.edu/finadmin/humres/policies/standards/aa_eeo.html; [link to student code of conduct](#)
<https://students.case.edu/handbook/policy>.

Definitions and Examples

Misconduct that falls within this policy includes:

Sexual Harassment

Sexual harassment ~~is can be~~ defined as any unwelcome verbal or non-verbal sexual advances, requests for sexual favors, other verbal or physical conduct of a sexual nature, and/or conduct directed at an individual(s) because of gender when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or student status; or
2. Submission to or rejection of such conduct is used as the basis for decisions affecting that individual with regard to employment (raises, job, work assignments, discipline, etc.) or to student status (grades, references, assignments, etc.); or
3. Such conduct has the purpose or effect of unreasonably and objectively interfering with an individual's work performance or educational experience or creates an intimidating, hostile, or offensive work and/or educational environment. Such conduct generally involves more than one incident and must be severe, persistent or pervasive (or may be ~~both~~ severe, persistent and pervasive). Depending on the nature of the incident, more than one action or incident is typically necessary to constitute this form of sexual harassment.

Acts that constitute sexual harassment take a variety of forms and may include but are not limited to the following unwelcome actions:

- a. Propositions, invitations, solicitations, and flirtations of a sexual nature.
- b. Threats or insinuations that a person's employment, wages, academic grade, promotional opportunities, classroom or work assignments, or other conditions of employment or academic life may be adversely affected by not submitting to sexual advances.
- c. Verbal expressions of a sexual nature, including sexual communications about a person's body, dress, appearance or sexual activities; the use of sexually degrading language, name calling, sexually suggestive jokes, or innuendoes; suggestive or insulting gestures, sounds or whistles; sexually suggestive phone calls.
- d. Sexually suggestive objects or written materials, such as social media, e-mail or internet communications, pictures, photographs, cartoons, text messages, videos, or DVD's.
- e. Inappropriate and unwelcome physical contact such as touching, patting, pinching, hugging or other sexually suggestive contact.
- f. Stalking of a sexual nature (i.e. persistent and unwanted contact of any form whether physical, electronic or by any other means). For stalking to fall within this policy, the content or the nature of the stalking must have a sexual component.
- g. Stereotyping or generalizing about a group based on gender. These types of comments typically constitute sexual harassment when associated with other sexual behavior or comments.

While a particular interaction must be offensive to both a reasonable person and to the complainant/victim to be defined as harassment, faculty and staff members and other persons of authority should be sensitive to questions about mutuality of consent that may be raised and to the conflict of interests that are inherent in personal relationships that result from professional and educational interactions. Harassment is particularly damaging when it exploits the educational dependence and trust between students and faculty/staff. When the authority and power inherent in faculty/staff relationships with students, whether overtly, implicitly, or through misinterpretation, is abused in any way, there is potentially great damage to the individual student, to the accused individual, and to the climate of the institution.

Sexual Exploitation:

Occurs when an individual takes non-consensual, unjust or abusive sexual advantage of another; for his/her own advantage or benefit; or to benefit or advantage anyone other than the one being exploited; and that behavior does not otherwise constitute non-consensual sexual contact, non-consensual sexual intercourse or sexual harassment. Sexual exploitation includes, but is not limited to:

- a. Non-consensual video or audio taping of any form of sexual activity
- b. Voyeurism, the practice of observing others engaged in intimate or sexual acts without the persons' consent, gaining sexual gratification by looking at sexual objects or acts, especially secretly
- c. Knowingly exposing a person to transmitting an STI or HIV to another person
- d. Prostituting another person by offering a person for sexual activity in exchange for payment.
- e. rostituting another person
- f. e. Invasion of sexual privacy, including exposing one's sexual body parts or exposing another's sexual body parts

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Non-Consensual Sexual Contact or Activity:

Non-Consensual Sexual Contact is contact that involves all of the following:

- a. Any intentional sexual contact or sexual activity; touching;
- b. with any object or body part;
- c. by a person upon another person; and
- d. without consent and/or by force

Sexual Contact includes: Intentional contact with the breast(s), buttock(s), groin or genitals, or touching another with any of these body parts; making another person touch you or themselves with any of these body parts; and/or any intentional bodily contact in a sexual manner.

Sexual Activity includes: Intentional bodily activity that is sexual in nature and involves the breast(s), buttock(s), groin or genitals, or touching another with any of these body parts; or making another person touch you or themselves with any of these body parts.

Forced Sexual Contact or Activity:

Forced Sexual Contact is contact that involves all of the following:

- a. Any intentional sexual contact or sexual activity; activity
- ~~a-b.~~ by force or against the will of the victim. Force includes: the use of physical means, violence, threats, intimidation or coercion;
- ~~b-c.~~ force includes: the use of physical means, violence, threats, intimidation or coercion;
- ~~c-d.~~ with any object or body part; and
- ~~d-e.~~ by a person upon another person.

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Sexual ~~Contact~~ activity includes: Intentional contact with the breast(s), buttock(s), groin, or genitals, or touching another with any of these body parts; making another person touch you or themselves with any of these body parts; and/or any intentional bodily contact in a sexual manner.

Sexual Activity includes: Intentional bodily activity that is sexual in nature and involves the breast(s), buttock(s), groin or genitals, or touching another with any of these body parts; or making another person touch you or themselves with any of these body parts.

Non-Consensual Sexual Intercourse:

Non-Consensual Sexual Intercourse is intercourse that involves all of the following;

- a. Any sexual intercourse (anal, oral or vaginal);
- b. with any object or body part;
- c. by a person upon a person; and
- d. without consent.

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Forced Sexual Intercourse:

Forced Sexual Intercourse is intercourse that involves all of the following;

- a. Sexual intercourse (anal, oral or vaginal) ~~by the use of force, including physical force, threat, intimidation or coercion;~~
- b. with any object or body part;
- c. by a person upon another person; and-
- ~~d. by the use of force, including physical force, threat, intimidation or coercion~~

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Additional Applicable Definitions

Unwelcome Behavior

Unwelcome behavior is an action that is not solicited or invited and is undesirable or offensive to the recipient. Behavior that is perceived to be voluntary does not necessarily mean that it is welcome. Power relationships, incapacitation, intimidation and/or fear of consequences may be contributing factors in this determination.

Consent

Consent is the equal approval, given freely, willingly, and knowingly, of each participant to desired sexual involvement. Consent is an affirmative, conscious decision – indicated clearly by words or actions – to engage in mutually accepted sexual contact. A person forced to engage in sexual contact by force, threat of force, or coercion has not consented to contact.

- Lack of mutual consent is the crucial factor in any sexual misconduct matter.
- Consent to some form of sexual activity does not necessarily constitute consent to another form of sexual activity.
- Silence without demonstrating permission does not constitute consent.
- Consent CANNOT be given if a person’s ability to resist or consent is incapacitated because of a mental illness or physical condition or if there is a significant age or perceived power differential.

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Incapacitation is a state in which someone cannot make rational, reasonable decisions because the person lacks the capacity to give knowing consent (e.g., to understand the “who, what, when, where, why or how” of their sexual interaction). Examples include, but are not limited to, being:

- a. unconscious,
- b. frightened,
- c. physically or psychologically pressured or forced,
- d. intimidated,
- e. incapacitated because of a psychological health condition,
- f. incapacitated because of voluntary intoxication, or
- g. incapacitated because of the deceptive administering of any drug, intoxicant or controlled substance.

Coercion

Coercion is unreasonable pressure for sexual activity.

Force

Force is the use of physical violence and/or imposing on someone physically to gain sexual access. Force also includes threats, intimidation (implied threats) and coercion that overcome resistance or produce consent.

Relevant Considerations**Relationships Involving Authority or Power**

When one party has any professional responsibility for another's academic or job performance or professional future, the university considers sexual relationships between the two individuals to be a basic violation of professional ethics and responsibility. This includes but is not limited to sexual relationships between faculty (including teaching assistants and laboratory supervisors) and their students or between supervisors and their employees, even if deemed to be mutually consenting relationships. Because of the asymmetry of these relationships, "consent" may be difficult to assess, may be deemed not possible, and may be construed as coercive. Such relationships also may have the potential to result in claims of sexual harassment. [For more information, see](#) Consensual Relationship Policy at <http://www.case.edu/finadmin/humres/policies/standards/cr.html>. or <http://www.case.edu/president/facsen/frames/handbook.htm>.

Although sexual harassment often takes place when the alleged harasser is in a position of power or influence (e.g., a faculty advisor to a student, supervisor to supervisee), other types of sexual misconduct are also possible e.g., peer to peer.

Intention vs. Impact

The fact that someone did not intend to engage in sexual misconduct against an individual is not considered a sufficient explanation to a complaint of sexual misconduct. For example, in some instances, cultural differences may play a role in the interpretation of behavior, by either the complainant or respondent, which may result in a complaint of sexual misconduct. It is expected that all members of the university community are knowledgeable about what constitutes sexual misconduct under this policy. Although the respondent's perceptions will be considered, in most cases, it is the effect and characteristics of the behavior on the complainant, and whether a reasonable person in a similar situation would find the conduct offensive that determine whether the behavior constitutes sexual misconduct.

Academic Freedom

Case Western Reserve University adheres to the principles and traditions of academic freedom. As stated in the Faculty Handbook, academic freedom is a right of all members of the university faculty and applies to university activities including teaching and research. See <http://www.case.edu/president/facsen/frames/handbook>. Each faculty member may consider in his or her classes any topic relevant to the subject matter of the course as defined by the appropriate educational unit.

Case Western Reserve University also recognizes, however, that these freedoms must be in balance with the rights of others not to be sexually harassed. It is therefore understood that the principles of academic freedom permit topics of all types, including those with sexual content, to be part of courses, lectures, and other academic pursuits. If there are questions about whether the course material or the manner in which it is presented falls within the definition of sexual harassment, the concerned party(s) should contact a Designated Reporting Representative (See: Designated Reporting Offices section in this policy).

Reporting

The university strongly encourages persons who experience sexual misconduct to report the misconduct, to seek assistance and to pursue university action for their own protection and that of the entire campus community.

Anyone who has experienced sexual misconduct may choose to use this university process as well as a criminal process. Choosing not to pursue university or criminal action, however, does not remove the responsibility of the university to investigate and/or take action. If pursuing a criminal process, see section on Emergency Room Examination/Preservation of Evidence, as applicable.

Reports can be submitted anytime following an incident of sexual misconduct, although the university's ability to take action may be limited by the timeliness of the report and the status of the alleged respondent. Generally, complaints should be brought to the attention of the university within two years of the alleged incident. The university reserves the right to utilize the sexual misconduct policy and procedures to take action concerning a complaint filed after brought beyond this period of time.

When conducting the investigation under this policy, the university's primary focus will be on addressing the sexual misconduct. Other policy violations discovered may be referred to another process.

~~Different people on campus have different reporting responsibilities and different abilities to maintain confidentiality, depending on their roles at the university and upon university policy. On campus, some resources can offer you confidentiality, sharing options and advice without any obligation to tell anyone unless you want them to. Other resources are expressly there for you to report crimes and policy violations, and they will take action when you report the incident to them. Most resources fall in the middle of these two extremes. Neither the university nor the law requires them to divulge private information that is shared with them except in certain circumstances, some of which are described below.~~

Designated Reporting and Confidential Support Resources

A person wishing to pursue university action must report the conduct to one of the three university Designated Reporting Representatives (See Chart I). Taking this action does not ~~prevent elude~~ reporting the matter to the CWRUCase Police and Security. To contact the CWRUCase Police and Security Services, call 216-368-3333.

Role of Designated Reporting Representatives

- ~~a. To hear the initial complaint/statement by the complainant and the respondent, and to make safety and support arrangements as appropriate.~~
- ~~a-b.~~ To receive initial complaint(s) regarding alleged sexual misconduct and to make the complainant aware of the university obligation to take action if the respondent is identified or identifiable.
- ~~b-c.~~ To provide the complainant and the respondent information about the policy and process, including the rights of the complainant and the respondent under this policy.
- ~~c.~~ ~~To hear the initial complaint by the complainant and the respondent, and to make safety and support arrangements as appropriate.~~
- d. To determine if the complaint falls within the Sexual Misconduct Policy and if so, to determine appropriate next steps.
- e. To conduct an inquiry into reports from anonymous sources. In such instances, the university may be limited in its ability to conduct an effective inquiry and to take action concerning the report.

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| Chart I. Designated Reporting Representatives |
|--|
| For Student Concerns: Director of Student Conduct and Community Standards Thwing, Lower Level Adelbert Hall 110 (216)368-3170 -- (M-Fri) 8:30 a.m. to 5:00 p.m. |
| For Faculty Concerns: Faculty Diversity Officer Adelbert Hall 315 (216)368-8877 -- (M-Fri) 8:30 a.m. to 5:00 p.m. |
| For Staff Concerns: Equal Employment Opportunity & Diversity Manager Adelbert Hall 315 (216) 368-8877 -- (M-Fri) 8:30 a.m. to 5:00 p.m. |

Role of Confidential Support Resources

Confidential resources are those members of the university who are licensed or designated by law as professionals who can receive privileged communication, and receive information regarding possible sexual misconduct in the context of a professional relationship with the reporter of that information.

Confidential resources are not required to report allegations of sexual misconduct to Designated Reporting Representatives unless required by law such as the duty to report an imminent threat to self or others (see Charts IIa. and IIb.). Confidential resources provide advice, support, and guidance about how to manage the situation without initiating university action. Discussions with a confidential source are not considered a report to the university or a request that any action be taken by the university in response to any allegation.

| Chart IIa. Student Confidential Support Resources | |
|--|--|
| On-Campus Resources | Off-Campus Resources |
| (SAFE) Line (216) 368-7777 – Anytime 24 / 7 For privileged and confidential conversations about sexual assault and relationship violence. | The Cleveland Rape Crisis Center (CRCC) (216) 619-6192 – 24 hours The Domestic Violence Center & Child Advocacy Center (DVCAC) (216) 391-HELP (4357) – 24 hours |
| University Counseling Services Sears 201 (216) 368-5872 – 24 Hours | |
| University Health Services 2145 Adelbert Rd. (216) 368-2450 – 24 Hours | |
| Flora Stone Mather Center for Women Thwing Center 309 (216) 368-0985-(M-Fri) 8:30 am - 5:00 pm Ask to speak with the Licensed | |

| | |
|--|--|
| Professional Health Advocate | |
| Inter-Religious Center: Church of the Covenant 11205 Euclid Avenue—Annex Muslim Campus Ministry, Newman Catholic Campus Ministry, and United Protestant Campus Ministry (216) 421-9614 or Hillel (216) 231-0040 (Ask to speak with a Clergy person) | |

Chart IIb. Faculty & Staff Confidential Support Resources

| On-Campus Resources | Off-Campus Resources |
|---|--|
| Employee Assistance Program (216) 241-EASE (3273) or (800) 521-3273 – 24 Hours | The Cleveland Rape Crisis Center (CRCC) (216) 619-6192 – 24 hours The Domestic Violence Center & Child Advocacy Center (DVCAC) (216) 391-HELP (4357) – 24 hours |

Anonymous Reports

In the event that the university receives an anonymous report of sexual misconduct, the university will conduct an inquiry into the matter. In such instances, the university may be limited in its ability to conduct an effective inquiry and to take action concerning the report.

Confidentiality & Retaliation

Confidentiality and Privacy

The [responsibility of the Designated Reporting Representative\(s\) is to weigh requests for confidentiality against the need to investigate and protect the university community](#). The [Designated Reporting Representative\(s\)](#) will attempt to keep complaints [private/confidential](#) to the extent possible and consistent with legal requirements and/or the university’s requirement to investigate allegations and take appropriate action. In reviewing a complainant’s request for confidentiality, the Designated Reporting Representative will weigh the request against other factors such as the seriousness of the alleged misconduct, whether other complaints have been made against the respondent, and the respondent’s right to receive information about the allegation under the Family Educational Rights and Privacy Act (FERPA).

In order to protect the integrity of the inquiry, investigation, and resolution through the use of this policy, all parties and witnesses are expected to maintain the confidentiality of the process. However, confidentiality is not required if disclosure is required by law, or if disclosure is necessary to report a crime or violation of law or to engage in concerted activity regarding terms or conditions of employment, or in relation to the right of a student respondent or complainant to re-disclose the outcome of the process under FERPA and/or Campus Crime Statistics Act (Clery Act) laws.

Although there is an expectation of confidentiality with regard to the process, the university recognizes that the complainant, respondent, and witnesses may need support. Should the need arise for parties and/or witnesses to [seek support and/or](#) share with others information regarding this process, they are encouraged to confer with the Designated Reporting Representatives [regarding before taking](#) this action, [including how to find a support person](#).

Retaliation

Retaliation ~~against persons raising concerns about sexual misconduct, against a person initiating a complaint, or against witnesses or any person cooperating in the sexual misconduct process~~ is prohibited and will constitute separate grounds

for disciplinary action. Retaliation is the act of taking adverse action against a complainant, a respondent, or any other person involved in the process under this policy based on the person's reporting or participation in the process under this policy. Retaliation includes behavior on the part of the respondent or the complainant and other related persons, including, but not limited to, acquaintances, friends, and family members. Although independent action will be taken against anyone engaging in retaliation, the complainant and the respondent are responsible for discouraging such actions and will also be held responsible to the extent of their involvement in the retaliation.

An individual who believes they have experienced retaliation should contact a Designated Reporting Representative (see Chart I) under this policy, and the university will investigate the complaint. If the university determines that evidence exists to support that retaliation occurred, appropriate action will be taken regardless of the outcome of the underlying sexual misconduct complaint. This may involve referral of the retaliation concerns to another university process for resolution.

Responsibilities of the University Community

Reporting Responsibility

Any ~~university faculty, staff, official or student employee member of the university community~~ who is consulted about and/or witnesses behavior involving potential sexual misconduct has the responsibility to report the potential misconduct to one of the Designated Reporting Representatives. Students are expected to report sexual misconduct when they are consulted about and/or witness behavior involving potential sexual misconduct, and may fulfill the reporting expectation by contacting a Designated Reporting Representative, or anonymously at the (SAFE) Line at 216-368-7777. In addition, to the extent possible, the member of the university community should advise the complainant of the university's sexual misconduct policy and encourage prompt reporting to a Designated Reporting Representative (see Chart I). The university community member's duty to report includes instances in which that member learns of the allegation ~~from:~~

a. From witnessing sexual misconduct

~~a-b.~~ From a person who has experienced the sexual misconduct;

~~b-c.~~ From a person who witnessed the sexual misconduct; or

~~c-d.~~ From a person who heard about the sexual misconduct from another individual.

Reporting is required in these instances if the university community member receives information that permits the member to identify (i) the complainant or the respondent by name or by other identifying information, or (ii) the location at which the sexual misconduct occurred. Because the university is committed to a positive educational and work environment, in instances in which individuals believe that behavior has occurred that could be construed as sexual misconduct, the individual is encouraged to report the incident to a Designated Reporting Representative.

Cooperating with Investigations

All members of the university community are encouraged to cooperate and participate in inquiries and investigations, appear before a hearing panel as requested, and cooperate with resolutions of complaints and implementations of recommended sanctions as applicable.

Police Responsibility

There may be instances in which sexual misconduct constitutes a criminal act. The police have a responsibility to uphold and enforce the law even if the person experiencing the misconduct does not want to participate in the process and/or make a complaint. As a result, once a report is made to a police officer and/or once the officer learns of possible criminal activity, the officer has a duty to investigate and may have a duty to forward information to the appropriate prosecutor's office for possible criminal prosecution. The CWRU Case Police will also notify Student Affairs or the Office of Inclusion, Diversity and Equal Opportunity as appropriate.

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When the person who has experienced sexual misconduct is under the age of 18, or under 21 and physically or mentally impaired, the Designated Reporting Representative may be required to report the sexual misconduct to the appropriate social service agency or the police.

Support of Witnesses and Bystanders

The welfare and safety of our community is of paramount importance. The university encourages community members to offer help and assistance to others in need. Sometimes individuals are hesitant to offer assistance to others for fear that they will be subject to sanctions for other policy violations (e.g. alcohol violations). While serious policy violations cannot be overlooked, the university will consider providing an educational options or training rather than sanctions intervention as an appropriate response to those who have offered assistance.

University's Investigative Responsibility

The informal and formal processes as described in this Policy apply to faculty, staff, and students of the university. (See Flow Chart in this Policy). Once a report of sexual misconduct is made to one of the Designated Reporting Representatives, the university is obligated by law to investigate and to take appropriate action regardless of whether the complainant wishes to participate or considers the behavior sexual misconduct.

The university's authority to investigate, to compel cooperation, or to impose sanctions against those who are not members of the university community is limited. The informal and formal processes as described in this Policy apply to faculty, staff, and students of the university. (See Flow Chart in this Policy). Complaints against guest lecturers, volunteers, contractors and visitors will be referred to the Vice President of Inclusion, Diversity and Equal Opportunity or his/her designee for investigation and appropriate action.

University's Responsibility to Support A Fair Process and the Rights of the Complainant and Respondent

The university is committed to providing support to anyone involved in an incident of sexual misconduct. The University is responsible for assuring that the rights of the complainant and the respondent are maintained by supporting a fair process for the handling of sexual misconduct matters and making determinations regarding the Policy. The complainant and the respondent can expect the university to respect the rights of all involved by following the stated university sexual misconduct process. The University will maintain the rights of the complainant and the respondent in implementing this Policy. These rights of the complainant and respondent related to the process include:

- a. To confidentiality as provided in this policy (see above).
- b. To options outlined below in the informal process or formal process if applicable.
- c. To the presence of a support person (as described in this policy below) at meetings during the initial inquiry and during the Informal process and/or Administrative/Formal Hearing (see Hearing Procedures).
- d. To not be questioned about past sexual conduct unless highly relevant to the case.
- e. To have the allegations investigated in a thorough and timely manner.
- f. To refrain from making statements. However, the university will make a determination of whether a violation of the sexual misconduct policy occurred based on the information presented.
- g. To be informed of the outcome of the sexual misconduct process in a timely manner.

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Notifications

Parental/Legal Guardian/Partner Notification

~~The university is committed to providing support to anyone involved in an incident of sexual misconduct.~~ In some instances when there is a health or safety concern involving a dependent or a non-dependent student, the university may need to notify the parent(s), guardian(s), or partner. In making this determination, the university will consider the wishes of those involved, as well as their personal safety, and the safety of the campus community. The university may contact the parent(s) or guardian(s) of a dependent student when there is a concerning behavioral pattern or a change in student status. In addition, when a person who is under the age of 18, or under 21 and physically or mentally impaired, reports sexual misconduct other than sexual harassment, both Designated Reporting Representatives and confidential sources may be required to report the sexual misconduct to the appropriate social service agency or the police who then may contact the parent or legal guardian.

Comment [CGT2]: This sentence was moved to section above.

Federal Timely Warning Obligations

Once a report of sexual misconduct is made, the university is obligated by law to take all necessary steps to protect the campus and the person who has experienced the misconduct. This may include alerting the campus of crimes that it determines pose a substantial threat of bodily harm or danger to members of the campus community. In making such determinations, the university will consider the safety of students, faculty, and staff as well as the privacy interests of all persons involved in such incidents. Regardless of the action taken by the university, the university will make every effort to ensure that a victim's name and other identifying information is not disclosed, while still providing enough information for community members to take safety precautions.

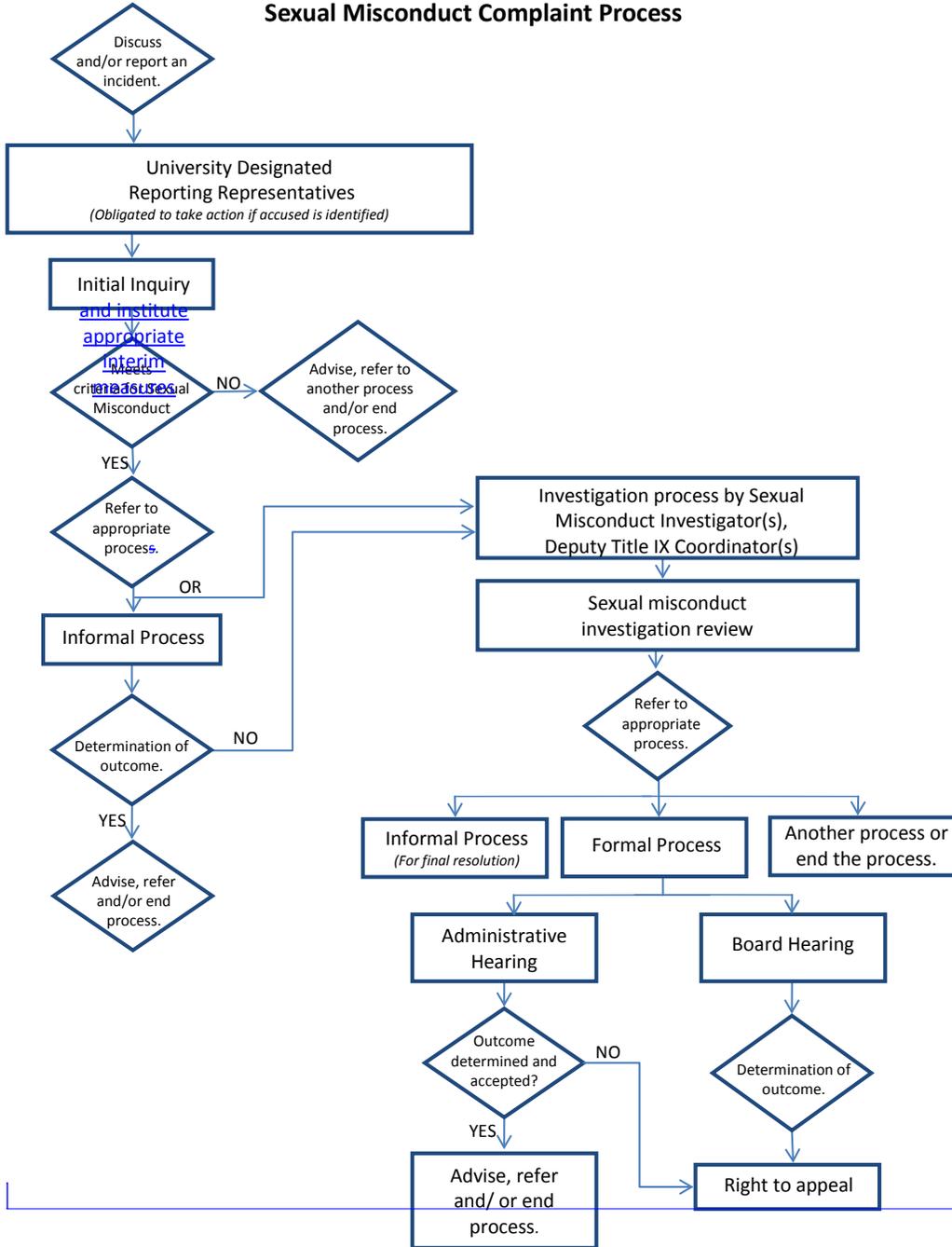
Federal Statistical Reporting Obligations

In compliance with the Clery Act (Campus Crime Statistics Act), Designated Reporting Representatives are required to report to [CWRUCase](#) Police sexual misconduct that constitutes a crime (i.e. anything not defined in this policy as sexual harassment). In addition, anonymous reports [and de-identified reports of crimes from confidential support resources](#) received by the [CWRUCase](#) Police are also included in the Clery Act Report. Typically, the following information is included: crime, date, location, and status (i.e. student, faculty, staff, stranger, etc.) of the individuals involved in the crime. The university never includes the names of the complainant or the respondent in crime statistics.

Comment [CGT3]: Include to address Women's Center issue

When a complaint of sexual misconduct is made that may also constitute a criminal act, the Designated Reporting Representative also will inform the complainant of the right to file a criminal complaint.

Student, Faculty & Staff Sexual Misconduct Complaint Process



Comment [CGT4]: Flow chart to be revised and re-formatted to indicate that if not resolved in informal, may go to formal. Also change diamonds to rectangles if not a "Yes/No" point. Also fix one box on "Refer to appropriate process ..."

University Complaint Processes

The university strongly encourages persons who experience sexual misconduct to report the misconduct, to seek assistance and to pursue university action for their own protection and that of the entire campus community.

When a complaint of alleged sexual misconduct is received, an initial inquiry is conducted by ~~the~~ Designated Reporting Representatives, who ~~is a~~ ~~are~~ neutral administrators in the process. The Designated Reporting Representatives ~~is~~ ~~are~~ responsible for coordinating the sexual misconduct process. The usual practice will be that the inquiry will be conducted in collaboration with the Office of Inclusion, Diversity and Equal Opportunity and the University Office of Student Affairs/[Office of Student Conduct](#) as appropriate and possible.

Time Table

The university intends to resolve complaints of sexual misconduct in a timely manner. The University generally attempts to resolve complaints from the filing of a complaint to a determination, ~~including any appeals,~~ within sixty (60) days. However extenuating or more complex circumstances may preclude the university from resolving a complaint within such a timeframe. Complainants and respondents will be provided periodic updates as to the status of the process ~~as appropriate.~~

Initial Inquiry

An initial inquiry is conducted by the Designated Reporting Representative/Deputy Title IX Coordinator and ~~will generally may~~ include interviews with the complainant and the respondent and a review of relevant documents. Following the initial inquiry, the Designated Reporting Representative will determine whether the information gathered during the initial inquiry indicates that the complaint falls within this policy. ~~The complainant and respondent will be informed promptly after the completion of initial inquiry.~~

If it is determined that the complaint falls within this policy, the Designated Reporting Representative will either: 1) proceed with the ~~in~~ informal ~~pro~~cess; or 2) refer the matter to the Sexual Misconduct Investigator/Deputy Title IX Coordinator ~~(for a determination as to whether the process should proceed to the Informal Process, the Formal Process, or another university process. See Investigator process below.)~~ The Designated Reporting Representative will make this determination by reviewing the following factors surrounding the complaint:

- a. The wishes of the complainant and the respondent;
- b. Consideration of a pattern of behavior; and
- c. The nature and severity of the behavior or action.

~~The complainant and the respondent will be informed promptly upon a determination by the Designated Reporting Representative.~~

Interim University Actions

~~In addition to conducting an initial inquiry, Upon receiving a complaint,~~ the Designated Reporting Representative may need to take interim actions to protect the safety and well-being of the individuals involved in a complaint of sexual misconduct. The university will consider interim or remedial measures, as appropriate or legally supported, to protect ~~the safety and well-being~~ of those involved. ~~These measures will be implemented as promptly as possible.~~ Generally, such actions include, but are not limited to, the following:

- a. Notify the respondent that a complaint has been made against them;
- b. Provide a copy of the university sexual misconduct policy to both parties;
- c. ~~Direct the parties or e~~ Establish an agreement between the parties that they are not to initiate contact with the other party or parties until further notice by the university. Failure to cooperate or honor the agreement could result in restricting either party's presence on campus;

~~e.d. Institute alternative work arrangements, living arrangements, class schedule, advisor/supervisor arrangements as feasible and appropriate during the pendency of the process, considering safety issues and concerns of the complainant and the respondent;~~

~~d.e. Have each of the parties and any witnesses acknowledge the expectation of confidentiality as outlined in this policy;~~

~~e.f. Advise all parties and any witnesses that they may not retaliate against any party or any witness involved in a sexual misconduct complaint.~~

~~f.g. Notify the dean, department chair or supervisor of the complaint to assist with managing the rights of the complainant and the respondent as appropriate.~~

Interim Separation/Suspension Action: The university has the right to impose an interim separation or suspension, as provided for under other university policies or procedures.

Role of the Designated Reporting Representative and/or Sexual Misconduct Investigator(s)

The Designated Reporting Representative and/or Sexual Misconduct Investigator conducts a prompt and thorough investigation of the complaint, which includes identifying and interviewing witnesses, gathering and securing relevant documentation, and identifying other relevant information. The Representative/ Investigator provides a report of the finding of the investigation for review by ~~the Title IX Coordinator or his/her designee at least one other Deputy Title IX Coordinator~~ in consultation with the Office of General Counsel. A decision will be made as to the appropriate next steps to bring resolution to the complaint, which will include one of the following:

- a. Formal Process (Administrative Hearing or Board Hearing);
- b. Informal Process;
- c. Another university process;
- d. End the process.

In making this determination, the reviewers will consider the following factors:

- a. The wishes of the complainant and the respondent;
- b. Consideration of a pattern of behavior; and
- c. The nature and severity of the behavior or action.

If the ~~Designated Reporting Representative/Sexual Misconduct Investigator investigation~~ finds that the complaint does not fall within the sexual misconduct policy, the matter and other possible policy violations discovered (including any relevant information) may be referred to other university processes.

~~**Rights Under the Informal and Formal Processes**~~

~~The complainant and the respondent can expect the university to respect the rights of all involved by following the stated university sexual misconduct process.~~

Comment [CGT5]: Moved earlier in policy to new section.

~~**Rights of the Complainant and the Respondent:**~~

- ~~a. To confidentiality as provided in this policy (see above).~~
- ~~b. To options outlined below in the informal process or formal process if applicable.~~
- ~~c. To the presence of a support person (as described in this policy below) at meetings during the initial inquiry and during the Informal process and/or Administrative/Formal Hearing (see Hearing Procedures).~~
- ~~d. To not be questioned about past sexual conduct unless relevant to the case.~~
- ~~e. To have the allegations investigated in a thorough and timely manner.~~
- ~~f. To refrain from making self-incriminating statements. However, the university will make a determination of whether a violation of the sexual misconduct policy occurred based on the information presented.~~

~~g.—To be informed of the outcome of the sexual misconduct process in a timely manner.~~

Informal Process

The informal process is an opportunity to bring resolution to an informal complaint through awareness, education, and/or a facilitated discussion. During an informal process, written statements are not taken from the complainant or the respondent, and no hearing is conducted to determine whether the sexual misconduct policy has been violated. Normally, the informal process will not be used to resolve allegations of Non-Consensual Sexual Contact, Forced Sexual Activity, Non-Consensual Sexual Intercourse, Forced Sexual Intercourse and Sexual Exploitation. [The complainant will be advised of the right to end the informal process and begin the formal process, if the complainant wishes to do so.](#)

Step 1-Facilitate Resolution

The Designated Reporting Representative(s) utilizes the information gathered during the initial inquiry to facilitate an appropriate resolution to the informal complaint. The Designated Reporting Representative(s) may determine that the informal action may be facilitated by an appropriate designee (e.g. for students, a Residential Coordinator or other designee; for staff, Human Resource representative; for faculty, the Chair). The following are examples of possible options, one or more of which may be used to bring resolution to an informal complaint.

- a. Distribute a copy of the sexual misconduct policy to the respondent and/or the complainant and/or to the department or area whose behavior is being questioned;
- b. Educate the respondent or all parties regarding the university sexual misconduct policy;
- c. Conduct a sexual misconduct educational workshop for the designated department/school/university organization;
- d. Meet with the respondent to raise awareness about alleged inappropriate behavior and provide notice about possible university consequences;
- e. Facilitated discussion with the agreement of the complainant, respondent, and the Designated Reporting Representative(s) or designee;
- f. Institute alternative work arrangements, living arrangements, class schedule, advisor/supervisor arrangements as feasible; or
- g. Limit contact or impose no contact between respondent and complainant.

Step 2-Document Informal Resolution

At the conclusion of the informal process, a letter summarizing the outcome(s) of the process will be sent by the Designated Reporting Representative(s) to the complainant and respondent and other appropriate university officials to bring closure to the matter (see Retention of Documents section in this policy).

If the matter is not resolved to the satisfaction of the complainant or the respondent utilizing the informal process, and/or the university determines the matter should be resolved through the formal process, the complainant, the respondent and/or the university may pursue the formal process. In such an instance, the complainant, the respondent and/or the university may request to utilize the formal process by submitting a written request to the Designated Reporting Representative within five (5) business days of the date of the receipt of the informal outcome letter.

~~Complaints by the University~~

~~The university may bring a complaint against a respondent in instances in which the complainant is not willing to bring a complaint and the university determines it is necessary to initiate a complaint. In such a case, the university will select a representative to act during the formal process.~~

~~Generally, if the respondent is a faculty member, the university representative shall be the Provost or his/her designee; if the respondent is a student, the university representative shall be the Vice President for Student Affairs or his/her designee; and if the respondent is a staff member, the university representative shall be the Vice President for Human~~

Comment [CGT6]: Revised and moved later in policy.

~~Resources or his/her designee. If the university representative is the respondent or a potential witness, the Vice President for Inclusion, Diversity and Equal Opportunity shall appoint the university representative. The university representative shall have the same rights and responsibilities as the complainant as outlined in this policy. The university representative shall not be an attorney from the Office of General Counsel.~~

Formal Process

Determination of Administrative Hearing vs. Board Hearing:

A formal process may be facilitated in one of two ways, through an administrative hearing or a board hearing.

An administrative hearing may be used when all of the following exist:

- a. The complainant wishes to use an administrative hearing to resolve the complaint;
- b. (i) The respondent has admitted to the alleged sexual misconduct and admits that the conduct is or could be construed as sexual misconduct under the university's policy, or
(ii) For matters in which the complainant and the respondent are both students, the Designated Reporting Representative/Investigator has determined, after consultation with the Title IX Coordinator or his/her designee and the Office of General Counsel, that an administrative hearing is appropriate to determine both whether a violation of the Policy has occurred and an appropriate sanction for a violation of the Policy, if any. In such cases, the Designated Reporting Representative/Investigator will determine that the administrative hearing shall be conducted, as appropriate, by either (a) a representative from the Office of Student Conduct & Community Standards, or (b) three (3) members of the Community Standards Board, selected as provided for in the Formal Process: University Community Standards Board section, below.
- c. The investigation or review determine(s) that an administrative hearing is appropriate to bring resolution to the complaint.

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A board hearing is used when the following exists:

- a. The complainant wants to use a board hearing to resolve the complaint, and/or the review of the investigation determines that a board hearing is necessary to resolve the complaint.
- b. The respondent does not admit that the alleged sexual misconduct has occurred and/or does not admit that the alleged conduct is or could be construed as sexual misconduct under this policy, or the Designated Reporting Representative/Investigator determines, after consultation with the Title IX Coordinator or his/her designee and the Office of General Counsel, that use of a board hearing is appropriate.

To move the formal process forward, the Sexual Misconduct Investigator/Deputy Title IX Coordinator will submit the following documents to the Community Standards Panel or administrative hearing representative(s) for their consideration at a formal hearing:

1. The written account from the complainant of the sexual misconduct complaint. When possible, the account should include dates, times, locations, a description of the alleged behavior/incident, and the name(s) of the respondent.
2. The written account from the respondent of the sexual misconduct complaint. When possible, the account should include dates, times, locations, a description of the alleged behavior/incident.
3. Additional written accounts from witnesses collected during the investigation.
4. Other relevant documents collected during the investigation, including the report of the Sexual Misconduct Investigator/Deputy Title IX Coordinator.

5. In addition, the complainant and the respondent may submit their own written statement about the facts of the alleged behavior/incident for consideration by the panel. Written statements must be submitted no later than two (2) business days prior to the scheduled hearing.
6. The complainant and the respondent may also submit their own written statement about the impact of the alleged behavior/incident for consideration by the panel during the sanction phase of the process, if applicable. Written statements must be submitted no later than two (2) business days prior to the scheduled hearing.
7. The complainant and respondent may provide a list of any person(s) who may have relevant information about the behavior/incident.
- ~~8.~~ 8. Once 1-7 have been completed, the case will be turned over to the chairperson of the Community Standards Board or the administrative hearing representative who will contact the complainant and respondent within five (5) business days to schedule a pre-hearing meeting and/or a hearing.

Formal Process: University Role to Address Violations of Policy Via Formal Process.

The university may address violations of the policy in instances in which the complainant is not willing to bring a complaint and the university determines it is necessary to proceed with a formal process under the policy. In such a case, the university will select a representative to act during the formal process.

Generally, if the respondent is a faculty member, the university representative shall be the Provost or his/her designee; if the respondent is a student, the university representative shall be the Vice President for Student Affairs or his/her designee; and if the respondent is a staff member, the university representative shall be the Vice President for Human Resources or his/her designee. If the university representative is the respondent or a potential witness, the Vice President for Inclusion, Diversity and Equal Opportunity shall appoint the university representative. The university representative shall have the same rights and responsibilities as the complainant as outlined in this policy. The university representative shall not be an attorney from the Office of General Counsel.

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Formal Process: Administrative Hearing

The function of this hearing is to review the relevant documents, hear from the respondent, and the complainant where complainant wishes to participate, and to determine whether the Sexual Misconduct Policy has been violated in cases in which the complainant and respondent are both students, and/or an appropriate sanction.

All administrative hearings will be conducted by (1) a representative of the Office of Inclusion, Diversity or Equal Opportunity, or the Office of Student Affairs/Student Conduct, or his or her designee ("the administrative hearing representative"), as appropriate, or (2) three members of the University Community Standards Board, as provided for in provision b.ii above.

Administrative Hearing Procedure

1. The complainant and respondent will be notified of the date, time and location of the hearing.
2. The hearing is closed and generally includes the respondent, the Sexual Misconduct Investigator/Deputy Title IX Coordinator who conducted the investigation, and the administrative hearing representative(s). The complainant will be notified of the option to attend the hearing if the complainant wishes to do so.
3. The complainant may submit an additional written statement concerning the effect of the sexual misconduct and the desired sanction for the respondent. The written statement must be submitted no later than two (2) business days prior to the scheduled hearing.

4. The respondent may make a statement about the sexual misconduct and the possible sanction(s) for the misconduct. The written statement must be submitted no later than ~~threetwo (32)~~ business days prior to the scheduled hearing.
5. The administrative hearing representative(s) may ask questions of the respondent and will consider the statements and any relevant information received during the investigation.
6. Prior to determining whether the Sexual Misconduct Policy was violated and/or a sanction, as applicable to the matter, the administrative hearing representative(s) will normally consult with the following individuals depending on the constituency of the respondent:
 - When a student is the respondent: Vice President for Student Affairs or his/her designee;
 - When a faculty member is the respondent: Provost or his/her designee;
 - When a staff member is the respondent: Vice President for Human Resources or his/her designee.

After the hearing is concluded, the administrative hearing representative(s) will make a decision promptly whether the Sexual Misconduct was violated , as applicable to the matter, and/or on the appropriate sanction and communicate that decision in writing to the respondent, complainant, and to any university administrators, faculty or staff who require the information to carry out the sanction. Generally, notification will be provided to the parties within two (2) business days after the administrative hearing is held, except when extenuating circumstances preclude notification to the parties within such a timeframe.

Administrative Hearing Appeal Process

If the complainant or the respondent is not satisfied with the outcome of the administrative hearing, either party may notify the appropriate Designated Reporting Representative in the Office of Student Conduct & Community Standards or the Office of Inclusion, Diversity & Equal Opportunity, as applicable, administrative hearing officer of the desire to file an appeal with the Appeals Board. Appeals must be submitted within ~~three (3) five (5)~~ business days of receipt of the written decision. An appeal as outlined below will then be held.

Formal Process: University Community Standards Board

The Office of Inclusion, Diversity and Equal Opportunity and the University Office of Student Affairs collaboratively select and train a Community Standards Board that includes representation from all constituent groups within the university community (students, faculty, staff) and that is charged to hear and make a determination about whether the sexual misconduct policy has been violated and if so, the appropriate sanction for the violation.

All formal complaints referred to the University Community Standards Board in which the complainant and the respondent are both students will be chaired by a representative of the Office of the Associate Vice President for Student Affairs/Student Conduct for Student Conduct, or his/her designee. For all other complaints involving different constituencies within the university (students, faculty or staff), a representative of the Office of Inclusion, Diversity and Equal Opportunity or the Office of Student Affairs will chair the hearing.

When a complaint is referred to the formal board process, the designated chairperson will select three representative members from the Community Standards Board at-large (faculty, staff and/or students) to serve as the hearing panel for an individual case. The hearing panel will be comprised of three voting members and a non-voting chairperson.

Pre-Hearing Procedure:

Prior to the board hearing, the chairperson will:

1. Determine available and appropriate hearing panel members from the Community Standards Board. Every attempt will be made to include panel members representing the constituencies of the complainant and the respondent. During certain times of the academic year (e.g. during break periods, final exam times etc.), the panel may not include student representation;

2. Consult with the complainant, the respondent and potential panel members to determine any personal and/or professional conflicts of interest that may make the panel member unable to render an unbiased decision. All panel participants are required to disclose any personal and/or professional conflicts of interest to the chairperson prior to agreeing to participate in a board hearing. The chairperson will determine whether a member should not serve on the panel because of a conflict of interest;

3. Advise the complainant and respondent of their right to have a support person at the hearing, whose function is to provide support for the complainant or the respondent. During the hearing, the support person may talk quietly with the complainant or the respondent or pass notes in a non-disruptive manner. The support person may not, in any way, intervene in the hearing or address the panel.

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A support person must be a current member of the university community (i.e. student, full-time faculty or full-time staff member). Neither party is entitled to legal representation (as the term is commonly understood) during the hearing. A support person may not be an attorney from the Office of General Counsel, or a witness in the matter. A support person from the university community may be an attorney by training, but is only permitted to act as a support person (as described above) during the hearing and not as an attorney. In cases of sexual misconduct other than sexual harassment or sexual exploitation, an exception may be made in order to permit use of a support person from an appropriate off-campus resource (e.g. Rape Crisis Center). The chair will assist in advising the complainant and respondent on how to obtain a support person;

4. Notify all panel members, the complainant, the respondent, the witnesses and all those involved in the hearing process that the hearing is closed and confidential and should not be discussed outside the hearing proceedings, except as provided in the Confidentiality section of this policy;

5. Provide ~~to~~ the panel members access to the information to be considered by the panel. The information shall include the file compiled by the Sexual Misconduct Investigator/Deputy Title IX Coordinator, which shall include the items compiled by the Sexual Misconduct Investigator/Deputy Title IX Coordinator (see listing above), as well as:

- a. Any other information submitted by the complainant or respondent as deemed relevant to the complaint. The chairperson, in consultation with the Sexual Misconduct Investigator/Deputy Title IX Coordinator, will make determinations as to the relevance of information submitted ;
- b. Any other information that may be relevant to the complaint;
- c. Witness list and witness accounts/statements. The Sexual Misconduct Investigator/Deputy Title IX Coordinator will confer with both the complainant and the respondent regarding which of their identified witnesses will be included in the hearing. The chairperson, in consultation with the Sexual Misconduct Investigator/Deputy Title IX Coordinator, will make the final determination as to which witnesses have relevant information.

6. Provide complainant, respondent, and support persons an opportunity to review all information prior to the hearing;

7. Arrange a hearing date, time, and location and notify all hearing participants;

8. Advise panel members about the complaint and the hearing procedures.

Hearing Procedure

1. The chairperson will convene the hearing by introducing the participants and explaining the sexual misconduct hearing purpose, procedures and ~~S~~standard of ~~P~~proof. Standard of Proof is the preponderance of evidence, which means that the panel must be convinced, in light of all the information presented, that it is more likely than not that the sexual misconduct policy was violated.

2. An audio recording of the hearing will be made.
3. The chairperson may determine that a complainant and/or the respondent may participate by telephone or video conference.
4. The complainant will be invited to make a statement to the panel.
5. The respondent will be invited to make a statement to the panel.
6. Panel members will be permitted to ask questions at the conclusion of each statement. The complainant and the respondent may then ask questions of each other by submitting written questions to the chair.
7. Witnesses are invited to make a statement before the panel. The panel members, the complainant and the respondent are invited to ask questions of each witness.
8. The complainant, the respondent and their support persons will be permitted to sit in the hearing during all statements and questioning. Witnesses will be permitted to attend only during their own statements and questioning. [The Investigator/Deputy Title IX Coordinator who investigated the matter shall be present at the hearing to answer questions from the panel.](#)
9. The panel may ask further questions of the complainant and the respondent after it has heard from all witnesses.
10. After all statements and questioning are completed, the panel will dismiss the complainant, the respondent and their support persons from the hearing and meet to discuss the finding.
11. The panel will consider all information received as part of the hearing process. The panel will issue one of the following findings, based on a preponderance of the evidence:
 - a. The University Sexual Misconduct Policy was not violated or;
 - b. The University Sexual Misconduct Policy was violated.

In addition, the panel may determine that the respondent's actions may violate some other university policy. The chairperson will refer the matter and all relevant information to the appropriate university process.

12. If the panel determines that the sexual misconduct policy was violated, the panel members will determine sanctions. Sanctions will be based on the nature and severity of the offense and/or on prior violations of university policy. The panel may consider the statements of the complainant and respondent regarding the impact of the behavior/incident during the sanction process. In general, sanctions may include, but are not limited to, one or more of the following:
 - a. Apology;
 - b. Participation in educational, skills or management training;
 - c. Written warning, or letter of reprimand;
 - d. Institute alternative work and/or living arrangements, class schedules, advisor/supervisor arrangements;
 - e. Limit contact between respondent and complainant;
 - f. Limit contact between the respondent and other members of the university community
 - g. Faculty and staff may face suspension without pay, consideration of or denial of advancement or pay raise, demotion, removal or suspension from administrative or honorary duties or appointments, or termination for cause;
 - h. Students may be suspended from the university, university housing, selected activities or organizations; placed on probation; or expelled from the university.
13. Prior to determining a sanction, the panel will normally consult with the following individuals depending on the constituency of the respondent:

When a student is the respondent: Vice President for Student Affairs or his/her designee
When a faculty member is the respondent: Provost or his/her designee
When a staff member is the respondent: Vice President for Human Resources or his/her designee

Report of Findings

1. The chairperson, in consultation with the panel, will draft a written report that includes the panel’s finding that:
 - a. The Sexual Misconduct Policy has been violated and the type of sexual misconduct violated as defined in this policy, or
 - b. The University Sexual Misconduct Policy has not been violated.
2. The report will also include the reason for the finding, and sanctions (if applicable).
3. The chairperson will distribute a copy of the report to the complainant, respondent, and to the respondent’s department chair, dean/supervisor, and appropriate vice president(s) or his/her designee. A copy of the report will be kept on file in the Office of Inclusion, Diversity and Equal Opportunity and the Office of Student Conduct & Community Standards, as applicable.
4. The chairperson will identify and notify the appropriate individuals to carry out the respondent’s sanctions, if applicable.
5. Sanctions are imposed immediately unless the chairperson stays their implementation in extraordinary circumstances, pending the outcome of the appeal.

Appeal Process

Either the respondent or the complainant may appeal the panel’s decision and/or the sanction to an Appeals Board. The Appeals Board shall consist of three (3) members of the Community Standards Board, selected by a Deputy Title IX Coordinator, or his/her designee, who has not been involved in the particular matter being appealed. the Vice President for Inclusion, Diversity and Equal Opportunity or his/her designee. The members of the Appeals Board shall not have served as a member of the hearing panel. The Appeals Board shall not rehear or make a redetermination of the facts of the matter, but will review only whether the decision erred in one of three ~~The limited~~ grounds on which an appeal may be filed, which are as follows: are limited to the following:

1. New information not available to the panel which, if available at the time of the hearing, would may have significantly affected the decision;
2. Evidence that established procedures were not followed in a manner that would may have significantly affected the decision, and/or;
3. The sanction (s) are substantially disproportionate to the severity of ~~was inappropriate for~~ the violation.

Appeals must be submitted to the appropriate Deputy Title IX Coordinator in the Office of Student Conduct & Community Standards or the Office of Inclusion, Diversity & Equal Opportunity, as applicable, Vice President for Inclusion, Diversity and Equal Opportunity or his/her designee within three (3) five (5) business days of receipt of the written decision and must specify the grounds for the appeal. The Deputy Title IX Coordinator or his/her designee Vice President for Inclusion, Diversity and Equal Opportunity shall determine whether the appeal submitted falls within one of the three grounds for appeal of a decision.

In reviewing the appeal, the Appeals Board shall review the panel’s report and sanctions to be imposed, and may review any documents, ~~the recording~~ or statements presented to the panel. Prior to issuing a decision, the Appeals Board also

Comment [CGT7]: Do we want to change to 48 hours, per Saunie?

~~shall have the option to~~ confer with the appropriate Vice President(s) for the constituencies of the complainant or the respondent.

~~The Appeals Board may accept the panel's finding and/or sanction, or reject, or modify the finding and/or sanctions of the panel based on one of the three grounds for appeal. Generally, if an Appeals Board finds that an appeal is valid in that either appeal basis #1 (substantial new evidence was not available to the panel that would have affected the decision) or #2 (evidence that established procedures were not followed in a manner that would have affected the decision), the Appeals Board will refer the appeal back to the Community Standards Board to rehear the matter and remedy the issue. As for appeal basis #3 (the sanction was substantially disproportionate to the severity of the violation),~~ The Appeals Board will make the final decision regarding the finding and the sanction based on a review of the existing written record.

The ~~appropriate Deputy Title IX Coordinator or his/her designee Vice President for Inclusion, Diversity and Equal Opportunity or his/her designee~~ will communicate the decision, in writing, to the respondent, the complainant, the panel members and to the appropriate administrators (i.e. respondent's department chair, dean/supervisor, and appropriate vice president).

The Appeals Board's decision shall be final with the exception of certain faculty sanctions described in "Additional Faculty Sanction Process."

Additional Faculty Sanction Process

If the sanction issued to a faculty member, following any appeals, is (1) termination of a tenured faculty member's appointment or (2) demotion in academic rank of a faculty appointment (professor, associate professor, assistant professor, or instructor), then the procedures in Section IV of the Faculty Handbook are initiated. The factual findings and conclusions of the Community Standards panel, or the Vice President for Inclusion, Diversity and Equal Opportunity following appeal, shall be determinative as to whether the university's sexual misconduct policy has been violated. The Section IV of the Faculty Handbook proceedings shall be limited to a determination of whether the finding constitutes just cause for termination of the tenured faculty appointment or for demotion in academic rank.

False Allegations

No complaint will be considered "false" solely because it cannot be corroborated. The university ~~will reserves the right to take appropriate action to address and/or impose appropriate~~ discipline of members of the university community who ~~file~~ documented false complaints of sexual misconduct. In such cases of proven false allegations, discipline may include ~~up to~~, but is not limited to, suspension or termination.

Support Resources

The following resources and options are available for individuals reporting sexual misconduct. Similarly, the university recognizes that a person being accused of a sexual misconduct may also utilize the following resources and options as appropriate and applicable.

Alternative Housing & Academic Accommodations

The university will accommodate requests for alternative living, working, and academic arrangements as available and appropriate. This is available with all reporting options in both informal and formal choices of action. The university reserves the right, based on the circumstances, to determine the most appropriate course of action in making alternative housing arrangements.

Counseling

Counseling may be pursued following an incident of sexual misconduct, no matter how much time has elapsed since the incident. The university offers a 24-hour telephone hotline for privileged and confidential conversations about sexual

assault and relationship violence (216-368-7777). By calling this number, students may choose to be connected with on and off-campus resources.

On-campus counseling services are available for students at University Counseling Service in Sears, University Health Service, and the Women's Health Advocate at the Flora Stone Mather Center for Women. There is no charge to students and the services are privileged communications. Counseling services are also available for faculty and staff through the Employee Assistance Program (EASE). See Support Resource Charts IIa. or IIb.

Emergency Room Examination/ Preservation of Evidence

Any person who is a victim of physical sexual violence is urged go directly to the Emergency Room at any local hospital for medical attention. For a list of hospitals close to campus, including those with a SANE (Sexual [Assault Misconduct](#) Nurse Examiner) Unit or staff specially trained for sexual misconduct examination and evidence collection, refer to the appropriate Confidential Support Resource charts in this policy or go to the university's Sexual Misconduct website at <http://www.case.edu/diversity/sexualconduct/> for more information.

It is important to note that the preservation of physical evidence is critical in the event of criminal prosecution and may also be useful if university action is pursued. To obtain the best evidence, a person who has experienced sexual violence should not wash her/his hands; shower or douche; brush her/his hair or teeth; or change her/his clothes immediately following the incident. If a victim goes to the hospital, local police will be called, and if the name of the accused is provided, the police will investigate, but the victim is not obligated to talk to the police or to pursue prosecution. Having the evidence collected in this manner will help to keep all options available to a victim, but will not obligate him or her to pursue any course of action.

University Health Service

Students can seek treatment or advice at the University Health Service for any medical concerns, including a physical exam, sexually transmitted infections, pregnancy testing, and to obtain emergency contraception. All medical information and services are privileged and confidential. There is a nurse and physician on-call 24 hours a day, 7 days a week at 216-368-2450.

If a student decides to file criminal charges, the student must sign a *University Health Service Medical Information Release Form* if the student wishes to allow the police, the university or their representative to gain access to medical information applicable to the sexual violence.

Retention of Documents

All records will be retained for at least as long as the respondent and/or the complainant(s) are members of the university community. For students, records will be kept for ~~five (5)~~ [seven \(7\)](#) years after the student graduates. For faculty and staff, records will be kept for at least six (6) years after the matter is closed and after the individuals are no longer members of the University community. Records will be kept in a confidential and secure location and only made available to Designated Reporting Representative(s), other appropriate university officials, or other authorized individuals as determined by law. In determining when it is appropriate to make available records regarding informal and formal complaints, the following provisions will apply:

Informal Complaints:

Information about all informal complaints will be kept on file in the offices of the Designated Reporting Representatives, and in the Office of Inclusion, Diversity and Equal Opportunity, and in a confidential file in the appropriate dean's and/or department chair's and/or supervisor's office when such dean/chair/supervisor is notified of the informal complaint to ensure that the university is maintaining records of those individuals about whom multiple informal complaints have been made and/or to enforce the informal resolution. Information concerning informal sexual misconduct complaints will not be considered in processes concerning future university misconduct unless the matter involves an allegation of sexual misconduct.

Formal Complaints:

If the respondent is found to have violated the sexual misconduct policy, a copy of the decision letter will be retained in the individual's official university file. If a future complaint of sexual misconduct is referred to a formal process, information regarding the previous sexual misconduct complaint(s) may be considered by the panel.

In the event that the respondent is involved in and found responsible for other university violations unrelated to sexual misconduct, information about formal sexual misconduct violations and sanctions will be shared with the board during the sanctioning phase.

If the person found in violation is a:

Faculty: The information will be kept on file in the Office of the Provost, the office of the appropriate dean and department, and the Office of Inclusion, Diversity and Equal Opportunity.

Staff: The information will be kept on file in Human Resources, the appropriate dean and/or department, and the Office of Inclusion, Diversity and Equal Opportunity.

Student: The information will be kept on file in the University Office of Student Affairs/[Student Conduct](#), the Dean's Office of the appropriate school, [if applicable](#), and the Office of Inclusion, Diversity and Equal Opportunity.

If the respondent is found not to have violated the sexual [misconduct/harassment](#) policy, a copy of the decision will be retained in the Office of Inclusion, Diversity and Equal Opportunity.

Annual Report

An annual report of sexual [misconduct/harassment](#) complaints and their resolutions shall be produced by the Vice President of Inclusion, Diversity and Equal Opportunity or his/her designee and accessible on the Office of Inclusion, Diversity and Equal Opportunity website. The report shall identify complainants and respondent by constituency only, e.g., student, staff, faculty.

Appendix A

Deputy Title IX Coordinators:

Gia Adeen
E.E.O. & Diversity Manager
Adelbert Hall 315
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-5371

[Kendra Svilar](#)
Director of Student Conduct/[Community Standards](#)
[Thwing, Lower Level](#)~~Adelbert Hall 110~~
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-~~3170~~[2020](#)

Melissa Burrows
Faculty Diversity Officer
Adelbert Hall 315
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-4299

Ashleigh Wade
Assistant Director of Student Conduct/[Community Standards](#)
[Thwing, Lower Level](#)~~Adelbert Hall 110~~
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-~~3170~~[2020](#)

G. Dean Patterson
Associate Vice President for Student Affairs

Adelbert Hall 110
10900 Euclid Ave.
Cleveland, Ohio 44106
216-368-1527

[Shannon Greybar Milliken](#) ~~FBA~~
[Deputy Title IX Misconduct Investigator/](#)
Assistant Director of Student Conduct/[Community Standards](#)
[Thwing, Lower Level](#)~~Adelbert Hall 110~~
10900 Euclid Hall
Cleveland, Ohio 44106
216-368-~~2020~~[3170](#)

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Position Descriptions:

Title IX Coordinator

The Title IX Coordinator is responsible for monitoring and oversight and overall implementation of Title IX Compliance at the University, including coordination of training, education communications and administration of grievance procedures for faculty, staff, students and other members of the university community.

Designated Reporting Representative

The Designated Reporting Representative is responsible for coordinating the sexual misconduct process. An initial inquiry is conducted by the Designated Reporting Representative and may include interviews with the complainant and the respondent and a review of relevant documents. Following the initial inquiry, the Designated Reporting Representative will determine whether the information gathered during the initial inquiry indicates that the complaint falls within this policy and will utilize criteria outlined in this policy to determine what process will be used to bring resolution to the sexual misconduct case.

Sexual Misconduct Investigator/Deputy Title IX Coordinator

The Sexual Misconduct Investigator/Deputy Title IX Coordinator serves as the investigator for sexual misconduct matters and conducts a prompt and thorough investigation of alleged sexual misconduct complaints, which includes identifying and interviewing witnesses, gathering and securing relevant documentation, and identifying other relevant information.

Other Sources for Information:

Office for Civil Rights
The U.S. Department of Education
600 Superior Ave. East Suite 750
Cleveland, Ohio 44114-2611
216-522-4970
Fax: 216-522-2573

OCR.Cleveland@ed.gov



Proposed Graduate Certificates and Master's

Case School of Engineering

March 12, 2014

EXECUTIVE SUMMARY

This proposal is a follow on to those in March 2011 and 2012 for a graduate certificate (GC) and a Master's, respectively, in wireless health—the Master's being an MS in Biomedical Engineering (BME) or Electrical Engineering (EE). Having now implemented and operated these since the fall semester of their proposed years, we now propose to create two new GCs in the topic through introduction of only two new courses. These two new GCs are: (1) wireless health product development; and (2) health information technology.

Our pioneering position in wireless health enables us to expand into wearable computing, which is an enabling technology for wireless health. Wearable computing is an extremely promising new field, with application to personal computing in addition to wireless health. We propose to offer three GC's and a Master's in wearable computing—the Master's being an MS in EE. The new GC's are: (1) wearable computing; (2) mobility-driven computing; and (3) security in computing. The Master's is comprised of the first two GCs being required, and either the third GC or the wireless health product development GC serving as the elective.

The proposed GCs and MS herein offer a rich set of leading-edge graduate study options in related areas, extending our distinctive position. We would like to offer them as of Fall 2014 to maintain of growth momentum and competitive advantage.

PROGRESS REPORT – THE LAST THREE YEARS

The infographic below provides an overview of our accomplishments over the period of Fall 2011 through Spring 2014 semester. The infographic does not show P/L, which has been over \$100,000 (profit) in each year. Our start-up success is in part due to the attractiveness of our subject matter selection.

Legend

| | | |
|---|---|----------------------------------|
| | Graduated with GC, did not pursue MS | 10 Students |
| | Graduated/Graduating with MS | 5 Students (as of May'14) |
| | Dropped out of the program | 3 Students |
| | # courses for which tuition was offset by Fellowship. See corresponding BME or EE total for # of courses to which it applied. | 4 Courses |
| negative # | Used in nonWH sheet to differentiate EE course section registration vs BME | |
| | Used in GC and MS sheets to guide the eyes across the semesters | |

WIRELESS HEALTH: Summary of # of Tuition-Paying Courses and Credits Taken, and Tuition, Grant and Development Income

| | YEAR -2 | | | | YEAR -1 | | | | | | YEAR 0 | | | | YEAR 1 | | | | Su '15 | | | | |
|-----------------------------|----------------|---|-------|---|----------------|---|-------|---|-------|---|----------------|---|-------|---|----------|---|--------|---|--------|-------|---|-------|---|
| | F '11 | | S '12 | | Su '12 | | F '12 | | S '13 | | Su '13 | | F '13 | | S '14 | | Su '14 | | | F '14 | | S '15 | |
| | C | # | C | # | C | # | C | # | C | # | C | # | C | # | C | # | C | # | | C | # | C | # |
| WH Course-Student # TOT | 90 | | | | 100 | | | | | | 99 | | | | 0 | | | | | | | | |
| WH Credits TOT | 270 | | | | 300 | | | | | | 297 | | | | 0 | | | | | | | | |
| WH Tuition Income | 401,490 | | | | 463,800 | | | | | | 477,576 | | | | 0 | | | | | | | | |
| WH Curriculum Grant Income | 80,000 | | | | 0 | | | | | | 10,000 | | | | 0 | | | | | | | | |
| WH Development Income | 0 | | | | 0 | | | | | | 16,000 | | | | 0 | | | | | | | | |
| TOTAL INCOME | 481,490 | | | | 463,800 | | | | | | 503,576 | | | | 0 | | | | | | | | |
| WH Sources of Grants | Qualcomm, Inc. | | | | - | | | | | | think[box] | | | | | | | | | | | | |
| WH Sources of Development | - | | | | - | | | | | | Ramon G. | | | | | | | | | | | | |
| # of WH GC Students | 8 | | | | 5 | | | | | | 3 | | | | | | | | | | | | |
| # of WH MS Students | 20 | | | | 26 | | | | | | 27 | | | | | | | | | | | | |
| TOT # of WH STUDENTS | 28 | | | | 31 | | | | | | 30 | | | | | | | | | | | | |
| # of WH MS Students - BME | 17 | | | | 19 | | | | | | 20 | | | | | | | | | | | | |
| # of WH MS Students - EE | 3 | | | | 7 | | | | | | 7 | | | | | | | | | | | | |

Our wireless health students are from San Diego and elsewhere, including Boston, Silicon Valley, Miami, Toronto and Singapore—the latter actually a full-time MS student. This broad geographic distribution of students attests to the effectiveness and efficiency of our course delivery model.

Our courses are gaining popularity with the main-campus students pursuing other degrees, including students from the schools of nursing, medicine and law. In this academic year, we have had 27 main-campus students from other degrees register for 99 course credits, i.e., some students for more than one course. (In the last academic year, we had 22 such students registering for 72 credits; the year before—being the first year of our program—3 such students registered for 9 credits.) Here again, our course delivery model makes enrollment of main-campus students in our courses seamless.

Finally, our success is in no small part because of the caliber of the adjunct faculty we hire in San Diego. They are appointed following the normal processes and standards of internal review as on the main campus. Our students learn from professionals who are in the marketplace, developing and commercializing leading-edge technology solutions. We emphasize engaging industry practitioners with leading subject matter expertise.

Wireless Health: Current Program

We currently offer: (1) a 27-credit Master's track in EE or BME comprised of 6 required 3-credit courses and 3 elective 3-credit courses¹; and (2) a 3-course, 9-credit certificate consisting of 3 of the required courses 480A, 480B and 480C. The certificate counts toward the Master's.

| Course Type | EBME or EECS | Course Title (<i>prerequisite</i>) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|-------------|--------------|---|-------------------------------|
| Required | 480A | Introduction to Wireless Health | Wireless Health |
| | 480B | The Human Body | |
| | 480C | Biomedical Sensing Instrumentation (480A, B) | |
| | 480D | Health Care Delivery Ecosystem | |
| | 480E | Wireless Communications and Networking | |
| | 480F | Physicians, Hospitals and Clinics (480A, B, D) | |
| Elective | 480M | Introduction to Medical Informatics | |
| | 480N | Health Decision and Knowledge Support Systems | |
| | 480P | Advance Biomedical Instrumentation (480C) | |
| | 480Q | RF Engineering for Medical Devices (480E) | |
| | 480R | User Experience Engineering | |
| | 480S | Wireless Health Product Development (480A, B) | |

Wireless Health: Enhanced as of Fall 2014

A new course 480O is being introduced. 480Q (which had not been offered to date) is being changed into an entirely new course/topic. 480S prerequisites 480A and 480B are being dropped, and 480Q and 480R are being added as its prerequisites. Two new graduate certificates are facilitated by these changes. The certificates count toward the Master's.

| Course Type | EBME or EECS | Course Title (<i>prerequisite</i>) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|-------------|--------------|---|---|
| Required | 480A | Introduction to Wireless Health | Wireless Health |
| | 480B | The Human Body | |
| | 480C | Biomedical Sensing Instrumentation (480A, B) | |
| | 480D | Health Care Delivery Ecosystem | |
| | 480E | Wireless Communications and Networking | |
| | 480F | Physicians, Hospitals and Clinics (480A, B, D) | |
| Elective | 480M | Introduction to Medical Informatics | Health Information Technology (new) |
| | 480N | Health Decision and Knowledge Support Systems | |
| | 480O | Health Info Technology Implementation (480M) | |
| | 480P | Advance Biomedical Instrumentation (480C) | |
| | 480Q | Regulatory Requirements and Regulations | Wireless Health Product Development (new) |
| | 480R | User Experience Engineering | |
| | 480S | Wireless Health Product Development (480Q, R) | |
| | | | |

¹EECS approved a 9-credit thesis version of its EE Master's track which only 4 of the required courses and allows for 2 electives. We plan to make this option available as of Fall 2014.

Wearable Computing: New Electrical Engineering Master’s Track & Related Certificates

Wireless Health is pulling for educational resources in wearable computing and security. We plan to expand our program to respond to these opportunities by offering a 27-credit Master’s track in Electrical Engineering titled Wearable Computing, using 6 required 3-credit courses and 3 elective 3-credit courses. The required courses also facilitate offering two new graduate certificates. The certificates count toward the Master’s.

| Course Type | EECS | Course Title (<i>prerequisite</i>) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|-------------|------|--|-------------------------------|
| Required | 480T | Wearable Computing Design | Wearable Computing |
| | 480U | Wearable Computing Technology | |
| | 480W | Wearable Computing Manufacturing | |
| | 480X | Mobility-Driven Computing | Mobile Computing |
| | 480Y | Mobility-Driven Embedded Systems | |
| | 480Z | Mobile Applications Development | |

The electives for the Wearable Computing Master’s track would be one of the following two certificates:

- Security in Computing (described in the table below); or
- Wireless Health Product Development (described in the wireless health tables above).

The certificates count toward the Master’s.

| Course Type | EECS | Course Title (<i>prerequisite</i>) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|-------------|------|--|-------------------------------|
| Elective | 480G | Cryptography | Security in Computing |
| | 480H | Software Security | |
| | 480K | Hardware Security | |

Other Considerations

The CSE San Diego program has a large internal and a substantive external advisory committee.

The San Diego site is now approved for accepting full-time foreign students as of Fall 2014.

For Master’s, students apply to the related department and undergo the department’s admission process.

For certificates, the students apply through the Office of Graduate Studies as non-degree students. A small committee of designated faculty of involved departments evaluates the applications.

Wearable Computing: Graduate Offerings Landscape

The table below presents a review of the universities with adjacent offerings to our proposal. Note that given Southern California’s related industry landscape, both San Diego State University (SDSU) and University of California, San Diego (UCSD) have adjacent offerings. Like we did with Wireless Health, we drive the Wearable Computing brand, a leading-edge subject.

| University | Offering | Courses |
|-------------------|---|---|
| Binghamton U | <u>Introduction to Mobile Computing & Networking</u> | Mobile computing & networking course |
| ITT Dublin | <u>MS in Distributed & Mobile Computing</u> | Mobile devices, Wireless networking, Architecture & design, XML for mobile computing, Content & delivery, Security, Mobile software development |
| ITT Dublin | <u>MSc in Distributed & Mobile Computing</u> | Two year MS; First year 8 courses; Second year mini-thesis |
| Marquette U | <u>Graduate Concentration in Mobile Computing</u> | MSCS 6355 Mobile Computing, MSCS 6931 Pervasive Computing MSCS 6931 Security/Privacy EECE 5840 Computer Security |
| San Diego State | <u>Advanced Web & Mobile Applications Certificate</u> | Courses through the College of Extended Studies |
| San Jose State | <u>Wireless Communication & Mobile Computing</u> | Wireless coursework Mobile Operating Systems & Architectures Mobile & Wireless Network Security Mobile & WLAN Interoperability |
| U of Washington | <u>Elective Courses</u> | CSS 545 Mobile Computing |
| UC San Diego | <u>MAS in Wireless Embedded Systems</u> | Nine * 4 unit courses including a Capstone project |
| U of Ottawa | <u>Computer Science Course</u> | CSI 5130 Application design for Mobile Devices |

CSE San Diego Program Rollout for Fall 2014

Wireless Health

Biomedical or Electrical Engineering Master's & Related Certificates

| Course Type | EBME or EECS | Course Title (prerequisite) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|---|--------------|--|---|
| Required | 480A | Introduction to Wireless Health | Wireless Health |
| | 480B | The Human Body | |
| | 480C | Biomedical Sensing Instrumentation (480A, B) | |
| | 480D | Health Care Delivery Ecosystem | |
| | 480E | Wireless Communications and Networking | |
| | 480F | Physicians, Hospitals and Clinics (480A, B, D) | |
| Elective - 3 of 7 courses, but encourage 1 of 2 certificates | 480M | Introduction to Medical Informatics | Health Information Technology (new) |
| | 480N | Health Decision and Knowledge Support Systems | |
| | 480O | Health Info Technology Implementation (480M) | |
| | 480P | Advance Biomedical Instrumentation (480C) | Wireless Health Product Development (new) |
| | 480Q | Regulatory Requirements and Regulations | |
| | 480R | User Experience Engineering | |
| | 480S | Wireless Health Product Development (480Q, R) | |

INTRODUCTION TO WIRELESS HEALTH
SPRING 2014
EBME/EECS 480A

COURSE DESCRIPTION: Study of convergence of wireless communications, microsystems, information technology, persuasive psychology, and health care. Discussion of health care delivery system, medical decision-making, persuasive psychology, and wireless health value chain and business models. Understanding of health information technology, processing of monitoring data, wireless communication, biomedical sensing techniques, and health monitoring technical approaches and solutions. (3 credit hours)

FACULTY: Mehran Mehregany, Ph.D.
Goodrich Professor of Engineering Innovation
Director, Wireless Health Program and Case School of Engineering San Diego Programs

TEXTBOOKS: *Wireless Health* by Mehran Mehregany, ed. Available to students in electronic form without additional cost.

ADDITIONAL MATERIAL: *The Creative Destruction of Medicine* by Topol (Basic Books).

COURSE OBJECTIVES: This course is designed to provide the students with the fundamental and practical knowledge necessary for an overall grasp of the field of wireless health.

CLASS TIME / LOCATION: Mondays, 6:00 to 7:00 PM EDT (i.e., Cleveland time) live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Carry out a cross-generational health study using an existing wireless health product.

LECTURE SCHEDULE:

| | |
|------|---|
| 1/13 | Overview of wireless health |
| 1/20 | NO CLASS - Martin Luther King Jr. Holiday |
| 1/27 | Physicians, hospitals and clinics |
| 2/3 | The U.S. health care system |
| 2/10 | Policy and regulatory issues |
| 2/17 | Personalized medicine and public health |
| 2/24 | Health information technology |
| 3/3 | Microsystems |
| 3/10 | NO CLASS – SPRING BREAK |
| 3/17 | Wireless communication and networking |
| 3/24 | Computing and information |
| 3/31 | Social networks and apps |
| 4/7 | Electronic Instrumentation |
| 4/14 | Medical device design |
| 4/21 | User experience design |
| 4/28 | Platforms, interoperability and standards |

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**THE HUMAN BODY
SPRING 2014
EBME/EECS 480B**

COURSE DESCRIPTION: Study of Structural organization of the body. Introduction to anatomy, physiology, and pathology, covering the various systems of the body. Comparison of elegant and efficient operation of the body and the related consequences of when things go wrong, presented in the context of each system of the body. Introduction to medical diagnosis and terminology in the course of covering the foregoing. (3 credit hours)

FACULTY: Enrique Saldivar, M.D., Ph.D.
Deputy Director, Program Management
Wireless Health Program
Email: enrique@case.edu

TEXTBOOKS:

The Human Body in Health and Disease, 5th Edition,
Thibodeau and Patton

RECOMMENDED ADDITIONAL MATERIAL:

Medical Terminology for Healthcare, Hutton

COURSE OBJECTIVES: This course is designed to provide the students with a basic understanding of anatomy, physiology, and pathology, as well as an introduction to medical terminology.

CLASS TIME / LOCATION: Tuesdays, 6:00 to 7:00 PM EDT (i.e., Cleveland time) live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Analysis of pathology of an organ.

LECTURE SCHEDULE:

1/14 Ch 1: Structure and function of the body
Ch 2: Chemistry of life
1/21 Ch 3: Cells and tissues
Ch 4: Organ systems of the body
1/28 Ch 5: Mechanisms of disease
Ch 6: Integumentary system and body membranes
2/4 Ch 7: Skeletal system
Ch 8: Muscular system

2/11 Ch 9: Nervous system
Ch 10: Senses
2/18 Ch 11: Endocrine system
2/25 Ch 12: Blood
Ch 15: Lymphatic system and immunity
3/4 Ch 13: Heart and heart disease
Ch 14: Circulation of blood
3/11 NO CLASS – SPRING BREAK
3/18 Ch 16: Respiratory system
Ch 21: Acid-base balance
3/25 Ch 17: Digestive system
Ch 18: Nutrition and metabolism
4/1 Ch 19: Urinary system
Ch 20: Fluid and electrolyte balance
4/8 Ch 22: Reproductive systems
4/15 Ch 23: Growth and development
Ch 24: Genetics and genetic diseases
4/22 **Project report**

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BIOMEDICAL SENSING INSTRUMENTATION
SPRING 2014
EBME/EECS 480C

COURSE DESCRIPTION: Study of principles, applications, and design of biomedical instruments with special emphasis on transducers. Understanding of basic sensors, amplifiers, and signal processing. Discussion of the origin of biopotential, and biopotential electrodes and amplifiers (including biotelemetry). Understanding of chemical sensors and clinical laboratory instrumentation, including microfluidics. (3 credit hours)

FACULTY: Enrique Saldivar, M.D., Ph.D.
Deputy Director, Program Management
Wireless Health Program
Email: enrique@case.edu

TEXTBOOKS:

Medical Instrumentation (Application and Design) by Webster (Wiley, 4th ed.)

PREREQUISITES: 480A, 480B

COURSE OBJECTIVES: This course is designed to provide the students with a basic understanding of biomedical instrumentation with emphasis on transducers.

CLASS TIME / LOCATION: Wednesdays, 6:00 to 7:00 PM EDT (i.e., Cleveland time) live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Design, build and demonstrate a Biomedical sensing device/instrument to be used in cardiology.

COURSE SCHEDULE:

| | |
|-------|--|
| WK 1 | Ch 1: Basic concepts of medical instrumentation |
| WK 2 | Ch 2: Basic sensors and principles |
| WK 3 | Ch 2: Basic sensors and principles |
| WK 4 | Ch 3: Amplifiers and signal processing |
| WK 5 | Ch 3: Amplifiers and signal processing |
| WK 6 | Ch 4: The origin of biopotentials |
| WK 7 | Ch 4: The origin of biopotentials |
| WK 7 | Ch 14: Electrical Safety (60 min) Workshop- Fundamentals of Design (<i>extra lecture</i>) |
| WK 8 | Ch 5: Biopotential electrodes |
| WK 9 | Ch 5: Biopotential electrodes |
| WK 10 | Ch 6: Biopotential amplifiers |
| WK 11 | Ch 6: Biopotential amplifiers |
| WK 11 | Ch 10: Chemical biosensors (<i>extra lecture</i>) |
| WK 12 | Ch 10: Chemical biosensors |
| WK 13 | Ch 11: Clinical laboratory instrumentation |
| WK 14 | Ch 11: Clinical laboratory instrumentation |
| WK 15 | Project Presentations |

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**THE HEALTH CARE DELIVERY ECOSYSTEM
FALL 2014
EBME/EECS 480D**

COURSE DESCRIPTION: Health care delivery across the continuum of care in the United States, including health policy and reform, financing of care, comparative health systems, population health, public health, access to care, care models, cost and value, comparative effectiveness, governance, management, accountability, workforce, and the future. Discussions of opportunities and challenges for wireless health, integrated into the foregoing topics. Perspective on health care delivery in other countries. (3 credit hours)

FACULTY: Karl Steinberg, M.D.
Adjunct Instructor, Dept. of Biomedical Engineering
Email: karl.steinberg@case.edu

TEXTBOOK: Health Care Delivery in the United States by Jonas and Kovner (Springer Publishing Company, 10th ed.)

ADDITIONAL MATERIAL: Reference Articles providing a perspective on health care delivery in other countries.

COURSE OBJECTIVES: This course is designed to provide the students with a basic understanding of health care delivery in the United States and the related opportunities and challenges for wireless health.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Bridge the gap between an available wireless health solution and the respective current delivery of care it is intended to displace/improve.

COURSE SCHEDULE:

8/29 Ch 1: The current U.S. health care system
9/5 Ch 2: Health policy and health reform
9/12 Ch 3: Health care financing
9/19 Ch 4: Comparative health systems
9/26 Ch 5: Population health
10/3 Ch 6: Public health: policy, practice, and perceptions
10/10 Ch 7: Health and behavior
10/17 Ch 8: Access to care
10/24 Ch 9: Organization of medical care
10/31 Ch 10: Integrative models and performance
11/7 Ch 11: High quality health care
11/14 Ch 12: Health care costs and value
11/21 Ch 13: Comparative effectiveness
11/28 No Class - Thanksgiving Break
12/2 Ch 14: Governance, management, and accountability
Ch 15: Health workforce (Extra Class)
12/5 Ch 17: The future of health care delivery in the U.S.

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**WIRELESS COMMUNICATIONS AND
NETWORKING
SPRING 2014
EBME/EECS 480E**

COURSE DESCRIPTION: Essentials of wireless communications and networking, including teletraffic engineering, radio propagation, digital and cellular communications, wireless wide-area network architecture, speech and channel coding, modulation schemes, antennas, security, networking and transport layers, and 4G systems. Hands-on learning of the anatomy of a cell phone, and a paired wireless health device and its gateway. (3 credit hours)

FACULTY: Stein Lundby
Adjunct Instructor, Dept. of Electrical Engineering & Computer Science

TEXTBOOK: Wireless Communications and Networking, Vijay Garg, (Morgan Kaufmann, 2007).

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

COURSE OBJECTIVES: This course is designed to provide students with a basic understanding and experiential learning of wireless communications and networking.

CLASS TIME / LOCATION: Thursdays, 6:00 to 7:00 PM PDT onsite in San Diego. Additionally, 90 to 120 minutes per week of video-record lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class time, same location. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Dissect a: (i) cell phone; and (ii) paired wireless health device and its gateway.

COURSE SCHEDULE:

| | |
|------|--|
| 1/16 | Introduction |
| 1/23 | Teletraffic |
| 1/30 | Radio propagation |
| 2/6 | Overview of digital communications |
| 2/13 | Fundamentals of cellular communication |
| 2/20 | Multiple access techniques |
| 2/27 | WWAN architecture and class project |
| 3/6 | Source coding – Part 1 |
| 3/13 | NO CLASS – SPRING BREAK |
| 3/20 | Source coding – Part 2, Video coding |
| 3/27 | Channel coding |
| 4/3 | Using channel coding |
| 4/10 | 802.11 + Link level simulator |
| 4/17 | 802.11 – Part 2 |
| 4/24 | 4G and beyond |

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PHYSICIANS, HOSPITALS AND CLINICS
SPRING 2014
EBME/EECS 480F

COURSE DESCRIPTION: Rotation through one or more health care provider facilities for a first-hand understanding of care delivery practice, coordination, and management issues. First-hand exposure to clinical personnel, patients, medical devices and instruments, and organizational workflow. Familiarity with provider protocols, physician referral practices, electronic records, clinical decision support systems, acute and chronic care, and inpatient and ambulatory care. (3 credit hours)

FACULTY: Mehran Mehregany, Ph.D.
Goodrich Professor of Innovation
Director, Wireless Health Program and Case School of Engineering San Diego Programs

TEXTBOOK: None.

ADDITIONAL MATERIAL: Reference articles

PREREQUISITES: 480A, 480B, 480D

COURSE OBJECTIVES: This course is designed to provide the students with a first-hand understanding of health care delivery in a clinical setting.

TOTAL TIME IN CARE SETTING: 40 hours.

OFFICE HOUR / LOCATION: By appointment.

LOCATION: A hospital, clinic or care center approved by the course faculty. Student may suggest site(s).

COURSE GRADE: Diary (100%), detailing the learning experience, developing a list of needs that are potentially addressable by wireless health solutions, and designing a wireless health solution that brings value to a care setting, e.g., patient care, clinical education, clinical staff workplace quality, health care systems delivery/management, etc.

LECTURE SCHEDULE:

Module 1: Primary/Outpatient Care – experience care delivery in an outpatient setting

Module 2: Urgent Care – observe care in an urgent/emergent setting, including the initiation of an admission to the hospital

Module 3: Inpatient Care, MD – spend day with an inpatient medical team to see hospital care, in a teaching setting

Module 4: Inpatient Care, RN – shadow RN during inpatient admission, ongoing care, and discharge processes

Module 5: Follow-up Care – choose from amongst recovery settings to observe convalescent care

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**INTRODUCTION TO MEDICAL
INFORMATICS
FALL 2014
EBME/EECS 480M**

COURSE DESCRIPTION: Current state and emerging trends in Medical Informatics (MI) and associated health information systems. Principles, data, data management, system interoperability, patient privacy, information security, electronic records, telehealth, regulatory issues, clinical decision support, mobile documentation, devices and wireless communications in healthcare. Impact of wireless technology on emerging health information systems and processes. (3 credit hours)

FACULTY: Alan F. Dowling, Ph.D.
Adjunct Professor
Health Systems Management Center
Department of Biomedical Engineering
Email: alan.dowling@case.edu

TEXTBOOK: *Biomedical Informatics* (4th edition), E. H. Shortliffe and J. J. Cimino, Springer, 2013.

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

COURSE OBJECTIVES: This course is designed to provide students with a basic understanding of medical informatics and related health information systems, enable them to effectively interact with health and medical professionals, and to understand the opportunities for wireless health solutions to contribute to effective health care.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online.

COURSE GRADE:

Exams (50%): 3 Exams, 1 every 3-4 weeks

Homework (20%): 3 assignment, ~1 every 3 weeks

Project (30%): Combine analysis and synthesis around a medical informatics system in order to integrate the topics into a full context.

COURSE SCHEDULE:

| | | |
|-------|--------|---|
| WK 1 | Ch 1: | Introduction and MI overview |
| WK 2 | Ch 2: | Information and systems principles |
| WK 3 | Ch 3: | Healthcare information systems |
| WK 4 | Ch 4: | Clinical information systems – institutional |
| WK 5 | Ch 5: | Clinical information systems – distance health |
| WK 6 | Ch 6: | Patient management and organizational information systems |
| WK 7 | Ch 7: | Inter-organizational health information systems |
| WK 8 | Ch 8: | Structure of health data |
| WK 9 | Ch 9: | Electronic patient records |
| WK 10 | Ch 10: | Health information exchanges |
| WK 11 | Ch 11: | Management of health data |
| WK 12 | Ch 12: | MI and healthcare reengineering |
| WK 13 | Ch 13: | MI technology transfer and adoption |
| WK 14 | Ch 14: | Regulation, privacy and rights |
| WK 15 | Ch 15: | Future MI and course review |

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**INTRODUCTION TO HEALTH DECISION &
KNOWLEDGE SUPPORT SYSTEMS
SPRING 2014
EBME/EECS 480N**

COURSE DESCRIPTION: Current state and emerging trends in use of decision support and knowledge support systems in health care delivery. Information, knowledge & decision principles; health data; clinical decision & knowledge support, DSS/KSS development & adoption, regulatory issues. Impact of wireless technology on emerging DSS/KSS and processes. (3 credit hours)

FACULTY: Alan F. Dowling, Ph.D.
Adjunct Professor
Health Systems Management Center
Department of Biomedical Engineering
Email: alan.dowling@case.edu

TEXTBOOK: *Biomedical Informatics* (Fourth edition), E. H. Shortliffe and J. J. Cimino, Springer, 2013.

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

COURSE OBJECTIVES: This course is designed to provide students with a basic understanding of decision and knowledge support systems in healthcare. It is intended to enable them to effectively interact with health and medical professionals, participate in the development and adoption of effective health DSS & KSS and to understand the opportunities for wireless health solutions to contribute to effective health care.

CLASS TIME / LOCATION: Mondays, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (50%): 3 Exams, 1 every 3-4 weeks

Homework (20%): 3 assignment, ~1 every 3 weeks

Project (30%): Combine analysis and synthesis around a clinical decision support system design or evaluation in order to integrate the topics into a contextually complete understanding of healthcare DSS/KSS.

COURSE SCHEDULE:

- WK 1 Course and Health DSS/KSS Overview
- WK 2 Definition and current state of DSS/KSS in health
- WK 3 Health data: attributes, sources and quality
- WK 4 Models of decision making
- WK 5 Decision impediments and fallacy
- WK 6 Decision and knowledge theory
- WK 7 Decision styles and utility
- WK 8 Complexity, optimization and predictive models
- WK 9 Framework for DSS and KSS
- WK 10 DSS and clinical care, rules and alerts
- WK 11 DSS and research, biostatistics and public health
- WK 12 Clinical transformation and DSS/KSS development
- WK 13 Technology transfer, adoption and evaluation
- WK 14 Legal and regulatory processes and issues
- WK 15 Student presentations, future DSS/KSS

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**INTRODUCTION TO HEALTH INFORMATION
TECHNOLOGY IMPLEMENTATION
SPRING 2015
EBME/EECS 4800**

COURSE DESCRIPTION: Current state and emerging trends in the implementation and adoption of health information technology (HIT). Macroergonomics; Technology transfer and adoption; Systems adoption life cycle; Impact of regulation; Decision and work transformation; HIT specification and acquisition; Contracting issues; Implementation, use, and evaluation; Impact of wireless technology on emerging processes. (3 credit hours)

FACULTY: Alan F. Dowling, Ph.D.
Adjunct Professor
Health Systems Management Center
Department of Biomedical Engineering
Email: alan.dowling@case.edu

TEXTBOOK: *Selected readings, cases, hand-outs.*

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

PREREQUISITES: 480M

COURSE OBJECTIVES: This course is designed to provide students with a basic understanding of HIT design and adoption processes in healthcare. It is intended to enable them to effectively interact with COTS vendors and health professionals, participate in the development and adoption of effective health IT and to understand the opportunities for wireless health solutions to contribute to effective health care.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online.

COURSE GRADE:

Exams (50%): 3 Exams, 1 every 3-4 weeks

Homework (20%): 3 assignment, ~1 every 3 weeks

Project (30%): Combine analysis and synthesis around a health care organization's acquisition / implementation / evaluation of a HIT application in order to integrate the topics into a contextually complete understanding of HIT implementation.

COURSE SCHEDULE:

- WK 1 Course & Health IT Implementation Overview
- WK 2 Definition & Current State of HIT Adoption
- WK 3 Macroergonomics & Workflow Transformation
- WK 4 Tech Transfer & Systems Adoption Life Cycle
- WK 5 Legal & Regulatory Requirements & Impact
- WK 6 HIT Strategic & Tactical Planning
- WK 7 HIT Portfolio & Prioritization
- WK 8 HIT SALC: Entry Phase, Ideation & Justification
- WK 9 HIT SALC: Adoption Planning & Management
- WK 10 HIT SALC: Functionality Requirements & Design
- WK 11 HIT SALC: Development / Acquisition & Contracting
- WK 12 HIT SALC: Implementation (pre-Go Live)
- WK 13 HIT SALC: Implementation (Go Live & ongoing use)
- WK 14 HIT SALC: Evaluation, Valuation & Exit
- WK 15 Future HIT Adoption / Implementation Issues

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REGULATORY POLICY AND REGULATIONS
FALL 2014
EBME/EECS 480Q

COURSE DESCRIPTION: Introduction of wireless health technologies: spectrum, licensed versus unlicensed; personal area networks; body area networks; ultra-wideband low energy level short-range radios; wireless local area networks; wide area networks. The Federal system: separation of powers; the executive branch and its departments; the House of Representatives and its committees; the Senate and its committees; the FCC; policy versus regulatory versus legislative. What is a medical device: FDA; classification system; radiation-emitting products; software; RF in medical devices; converged medical devices; international aspects. Regulation of health information technology and wireless health: American Recovery and Reinvestment Act; Patient Protection and Affordable Care Act; FCC/FDA MoU; CMS and Reimbursement; privacy and security. (3 credit hours)

FACULTY: TBD.

TEXTBOOK: *Medical Devices Law and Regulation Answer Book 2013*, Suzan Onel and Karen Becker, Ed., PLI, 2012.

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

COURSE OBJECTIVES: This course is designed to provide students with an understanding of medical device regulatory policy and regulations, including consideration of wireless health devices.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Preparation and simulated submission of a wireless health device application to the FDA.

COURSE SCHEDULE:

| | |
|-------|--|
| WK 1 | Wireless health technologies |
| WK 2 | Wireless health technologies – continued |
| WK 3 | The Federal system |
| WK 4 | The Federal system – continued |
| WK 5 | The Food and Drug Administration |
| WK 6 | The classification system |
| WK 7 | The classification system – continued |
| WK 8 | Radiation emitting products; software |
| WK 10 | RF in medical devices |
| WK 11 | Converged medical devices; international aspects |
| WK 12 | American Recovery and Reinvestment Act |
| WK 13 | Patient Protection and Affordable Care Act |
| WK 14 | FCC/FDA Memorandum of Understanding; CMS and reimbursement |
| WK 15 | Privacy and security |

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USER EXPERIENCE ENGINEERING
FALL 2014
EBME/EECS 480R

COURSE DESCRIPTION: User Experience Engineering: Social, cognitive, behavioral, and contextual elements in the design of healthcare technology and systems. User-centered design paradigm from a broad perspective, exploring dimensions of product user experience and learning to assess and modify the design of healthcare technology. Practical utilization of user centered design method and assessment techniques for approaching a design. (3 credit hours)

FACULTY: Srinivas Raghavan, MBA, Ph.D.
Adjunct Professor, Department of Electrical Engineering & Computer Science

TEXTBOOKS: *Mobile Persuasion*, Fogg and Eckles. Also, *Elements of User Experience*, Jesse James Garrett.

ADDITIONAL MATERIAL: Reading references on Blackboard.

COURSE OBJECTIVES: This course is designed to provide the students with a basic understanding of user experience and build skills in practical assessment of healthcare product design.

CLASS TIME / LOCATION: Once a week, 6:00 to 8:30 PM PST onsite in San Diego.

OFFICE HOUR / LOCATION: The hour before class time, same location. Also, by appointment.

COURSE GRADE:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments, ~ biweekly

Project (30%): Design, build and demonstrate an improved user interface model for an existing medical end-to-end solution.

LECTURE SCHEDULE:

- WK 1 Overview of the design process
- WK 2 Design for the consumer patient
- WK 3 Design for the care team
- WK 4 Designing for regulatory compliance
- WK 5 Consumer patient: basic principles of design
- WK 6 Consumer patient: mental models
- WK 7 Consumer patient: working with tradeoffs
- WK 8 Consumer patient: designing the end-to-end experience
- WK 9 Consumer patient: user interface design
- WK 10 Consumer patient: applying the principles by evaluating products
- WK 11 Health care team: defining the team and usage contexts
- WK 12 Health care team: workflow
- WK 13 Health care team: designing the patient experience
- WK 14 Health care team: user interface design
- WK 15 Health care team: applying the principles by evaluating products

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**ADVANCED BIOMEDICAL
INSTRUMENTATION
Spring 2014
EBME/EECS 480P**

COURSE DESCRIPTION: Analysis and design of biosensors for biomedical measurements. Base sensors using electrochemical, optical, piezoelectric, and other principles. Binding equilibria, enzyme kinetics, and mass transport modalities. Adding the “bio” element to base sensors and mathematical aspects of data evaluation. Applications to clinical problems and biomedical research. (3 credit hours)

FACULTY: Enrique Saldivar, M.D., Ph.D.
Deputy Director, Program Management
Wireless Health Program
Email: enrique@case.edu

TEXTBOOK: *Medical Instrumentation (Application and Design)* by Webster (Wiley, 4th ed.).

ADDITIONAL MATERIAL: Reference articles.

PREREQUISITES: 480C

COURSE OBJECTIVES: This course is designed to provide the students with an understanding and experiential learning of advanced biomedical sensor instrumentation.

CLASS TIME / LOCATION: Mondays 6:00 to 8:30 PM PST (i.e., San Diego time) onsite in San Diego.

OFFICE HOUR / LOCATION: The hour before class time. Same location as class.

COURSE GRADE: Course grade will be determined from grades for:

Quizzes (30%): ~ biweekly

Homework (40%): 4 assignments to build for the project, ~biweekly.

Project (30%): Design, build and demonstrate a biomedical health device or instrument.

COURSE SCHEDULE:

Jan/13 Image Processing Technologies; Molecular, Confocal and Two-Photon Imaging
Jan/20 NO CLASS - Martin Luther King Jr. Holiday
Jan/27 X-rays; CAT
Feb/3 Magnetic Resonance Imaging; Positron Emission Tomography

Feb/10 Molecular Biology Techniques; Green Fluorescent Protein; Luciferase Expression; Single-Photon Emission Computed Tomography; Opto-Chemical Detection
Feb/17 Holographic Techniques and Sensors; Flow Cytometry
Feb/24 Advanced Imaging; Terahertz Technologies; Bragg’s diffraction; Scintigraphy
Mar/3 Enzyme-Electrodes Biosensors; Enzyme-Kinetics; Mass Transport Considerations
Mar/10 NO CLASS – Spring Break
Mar/17 Electrochemical Sensing; Electroenzymatic Detection
Mar/24 Nernst and Butler-Volmer Equations; Potentiometry; Coulometry; Voltmetry
Mar/31 Amperometry; Polarometry; Opto-Chemical Sensors
Apr/7 FET/Other Molecular Sensing; DNA Sensing
Apr/14 Piezoresistive Sensors; Continuous Blood Pressure Measuring; Capacitive Sensors
Apr/21 Mach-Zehner Interferometer; Tactile Sensors; Nano-Photonics; Surface Plasmon Resonance
Apr/28 Instrumentation/Therapeutic Technologies; Feedback Systems/Artificial Pancreas; Electroporation; Nanotechnologies and Cancer; Homing Peptides; Ultrasound and Microbubbles Drug Delivery Systems

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**WIRELESS HEALTH PRODUCT
DEVELOPMENT
SPRING 2014
EBME/EECS 480S**

COURSE DESCRIPTION:

Integrating application requirements, market data, concept formulation, design innovation and manufacturing resources for creating differentiated wireless health products that delight the user. Learning user-centric product development best practices, safety, security and privacy considerations, and risk management planning. Understanding the regulatory process. Identifying and managing product development tradeoffs. (3 credit hours)

FACULTY: Srinivas Raghavan, MBA, Ph.D.
Adjunct Professor, Department of Electrical Engineering & Computer Science

TEXTBOOKS:

Reliable Design of Medical Devices, 3rd Edition 2012.
Richard C. Fries. CRC Press.

ADDITIONAL MATERIAL: Reading references posted on the Blackboard site.

PREREQUISITES: 480Q, 480R

COURSE OBJECTIVES: This course is designed to provide the students with the concepts and techniques involved in successful product development. We focus on building skills in practical assessment of healthcare product design.

CLASS TIME / LOCATION: Thursdays, 6:00 to 8:30 PM PST onsite in San Diego.

OFFICE HOUR / LOCATION: The hour before class time, same location. Also, by appointment.

COURSE GRADE:

Exams (30%): 3, ~ every 5 weeks

Homework (40%): 6 assignments, ~ biweekly

Project (30%): Evaluate, re-design, build and demonstrate an improved product for an existing medical end-to-end solution.

COURSE SCHEDULE:

- 1/16 Overview of medical product development
- 1/23 Applying principles to re-design products

- 1/30 User centered product development
- 2/6 Intellectual property as a product differentiator and strategic tool
- 2/13 Product requirements – working with marketing- and customer-facing teams
- 2/20 Product concept definition – market requirements document, business plan
- 2/27 Product development lifecycle and process
- 3/6 Reliability, safety and risk management; Regulatory processes and requirements
- 3/13 NO CLASS – SPRING BREAK
- 3/20 Tradeoffs in hardware and software design
- 3/27 Verification and validation of medical products including human factors and usability testing
- 4/3 Design transfer and manufacturing
- 4/10 Product management and development team
- 4/17 Product marketing and sales
- 4/24 Applying principles to design new products

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CSE San Diego Program Rollout for Fall 2014

Wearable Computing Electrical Engineering Master's & Related Certificates

| Course Type | EECS | Course Title (<i>prerequisite</i>) each course is 3 credit hours; MS requires ≥ 27 credits | Certificate 9 credit hours |
|--------------------------------------|------|---|---|
| Required | 480T | Wearable Computing Design | Wearable Computing (new) |
| | 480U | Wearable Computing Technology | |
| | 480W | Wearable Computing Manufacturing | |
| | 480X | Mobility-Driven Computing | Mobility-Driven Computing (new) |
| | 480Y | Mobility-Driven Embedded Systems | |
| | 480Z | Mobile Applications Development | |
| Elective - 1 of 2 certificates | 480G | Cryptography | Security in Computing (new) |
| | 480H | Software Security | |
| | 480K | Hardware Security | Wireless Health Product Development (new) |
| | 480Q | Regulatory Requirements and Processes | |
| | 480R | User Experience Engineering | |
| | 480S | Wireless Health Product Development (<i>480Q, R</i>) | |

WEARABLE COMPUTING DESIGN
FALL 2014
EECS 480T

COURSE DESCRIPTION: Learning about wearable devices using flexible/conformal electronics designed for convenience and uninterrupted wearability. Examining related design challenges from the technology, human and business points of view. Understanding wearable product design for general and special-purpose tasks in information processing, media operations, and information extraction from sensed data. Learning about the technological challenges for design, including miniaturization, power delivery and management, data storage, and wireless networking. Learning about hardware choices (processor, field programmable gate array or custom ASIC based design) for wearable computers and software architectures for smart data processing. Learning about wearable designs centered on the human experience, including sensing and interfacing with the human body, as well as user interaction, convenience, and support for non-intrusive social appearance. Case studies tying the business requirements with the technology and design issues. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in design of wearable computing.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Overview of wearable computing: application space, system design needs, and challenges
2. Bringing together technology, human, and business models
3. Miniaturization, power delivery and management, data storage, and wireless networking
4. Overview of wearable product design
5. General or special-purpose tasks in information processing, information extraction from sensed data
6. Product user experience considerations
7. Implantable device design, body area network
8. Overview of wearable hardware design
9. Hardware choices, e.g., processor, field programmable gate array (FPGA) and custom ASICs
10. Software architecture and algorithms
11. Overview of large data storage and processing
12. Data collection and data processing techniques
13. Emerging technologies and applications
14. Case studies
15. Case studies

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**WEARABLE COMPUTING
TECHNOLOGY
FALL 2014
EECS 480U**

COURSE DESCRIPTION: Learning about a broad range of cutting-edge technologies suitable for wearable computing. Understanding printed and flexible electronics technologies required for creating wearable computing, in particular organics for active components due to their flexibility or conformity. Examine the tradeoffs between flexible/conformal versus rigid electronics in the context of wearable computing. Reviewing the history of printed electronics used as conductors for membrane keypads, car windscreen heaters and RFID tag antennas—to name a few application examples. Reviewing the latest technology advances in functional components such as displays, lighting, transistors (p-type & n-type), memory, batteries, photovoltaics (PV), sensors, and conductors as well as integration/packaging steps. Understanding the market potential of these technologies by reviewing emerging products. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in technology topics that underpin wearable computing.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Overview of technologies for wearable computing
2. Flexible and conformal substrate technologies
3. Flexible and conformal device technologies
4. Tradeoffs between flexible and conformal versus rigid electronics technologies
5. Evolution of printed electronics technology
6. Large-area, printed electronics
7. Challenges with printed electronics technology
8. Development of augmented reality
9. Influence of augmented reality on wearable computing technology
10. Silicon devices on flexible substrates
11. Non-silicon devices on flexible substrates
12. Optical devices and displays on flexible substrates
13. Photovoltaics and batteries on flexible substrates
14. Sensors on flexible substrates, packaging & system integration
15. Interconnects on flexible substrates

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**WEARABLE COMPUTING
MANUFACTURING
FALL 2014
EECS 480W**

COURSE DESCRIPTION: Learning about the supply chain and manufacturing processes for flexible electronics, sensors, and other technologies contributing to the development of wearable products. Understanding supply chain issues in low mobility materials, multilevel substrates, nanocomposites, materials for low power sensors, and inks suitable for direct printing. Identifying the tradeoffs involved in various manufacturing methods such as roll-to-roll manufacturing a mature coating technology yet to be proven for full device integration. Studying other manufacturing techniques such as plate-to-plate, direct printing, 3D printing, and screening techniques for their applicability to the manufacturing and integration of flexible electronics. Understanding the use of lithography and vapor deposition techniques in the context of flexible electronics. Examining the issues of systems integration and packaging of the manufactured products. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in manufacturing of wearable computing.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Review of microelectronics fabrication technology
2. Fabrication of flexible electronics: challenges & solutions
3. Materials used in flexible electronics
4. Fabrication techniques used in printed electronics
5. Materials used in printed electronics
6. Fabrication techniques used in non-printed electronics
7. Materials used in non-printed electronics
8. Value chain from materials to products
9. Supply Chain for flexible electronics
10. Transferring from lab to fab
11. Manufacturing techniques and integration
12. Roll-to-Roll and plate-to-plate techniques
13. Printing tools, including three-dimensional (3D) printing, screen printing
14. Testing and verification
15. Packaging and reliability

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MOBILITY-DRIVEN COMPUTING
FALL 2014
EECS 480X

COURSE DESCRIPTION: Fundamental concepts in computing and architecture for mobile devices, mobile operating systems, mobility and mobile data management. Application of technologies for location awareness, context awareness, integrated sensors, mobile Internet, displays, pattern recognition and natural language processing, and touch/gesture based user interaction. Understanding of the tradeoffs in design (smartphones, tablets) due to resource constraints such as wireless connectivity, application processing, power management, and graphics. Integration of near- and wide-area wireless communication technologies (Bluetooth, Wireless WAN). Exploration of emerging technologies and services for the mobile platform. Integration of the foregoing concepts in a specific mobile context application (home/office, pedestrian, vehicular). (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in mobile computing paradigm.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Introduction to the fundamental concepts in mobility-driven computing
2. Architecture of mobile devices
3. Mobile operating systems
4. Mobile data management
5. Technology for location and context awareness
6. Integrated sensors and processing of sensed data
7. Mobile internet and displays
8. Pattern recognition and natural language processing
9. Design trade-offs due to resource constraints
10. Power and resource management
11. Integration of diverse wireless communication technologies (Bluetooth, WAN, NFC)
12. Exploration of emerging technologies
13. Exploration of emerging services and needs
14. Computing concepts in specific mobile context: home/office
15. Computing concepts in specific mobile context: pedestrian, vehicular

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**MOBILITY-DRIVEN EMBEDDED
SYSTEMS
FALL 2014
EECS 480Y**

COURSE DESCRIPTION: Foundations of reliable, energy-efficient and secure design of embedded systems. Fundamentals of mobility in embedded systems including wireless technology, location awareness, sensors, and actuators. Design consideration for processors, DSP, memory, and interfaces under mobility constraints (connectivity, power, and data management). Systems software for embedded computing, device management, and real-time I/O. Software design under constraints of size, performance, availability, and reliability. Software development techniques and practices (compilers, OS, and runtime systems). Case studies of mobility driven real-time embedded systems and software. Applications of mobility driven embedded systems, for example in in biomedical implant systems.
(3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in design of mobile embedded systems.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Fundamentals of mobility in embedded systems
2. Mobility Constraints: energy-efficiency, form factor, security, reliability
3. Overview of design considerations
4. Design choices of processors, DSP, memory
5. Wireless technology
6. Energy issue
7. Reliability issue
8. Security and privacy
9. Software design under mobility constraints
10. System software for embedded computing
11. Device management and real-time I/O
12. Software development techniques and practices
13. Applications of mobility-driven embedded systems
14. Case studies
15. Case studies

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**MOBILE APPLICATIONS
DEVELOPMENT
FALL 2014
EECS 480Z**

COURSE DESCRIPTION: Understanding of the mobile application architecture, operating systems, and platforms. Challenges and opportunities in mobile application development. Evaluation of the leading mobile platform frameworks with respect to their features, functions, libraries, support, and ease of development. Software design for mobile applications in gaming, multimedia, entertainment, and enterprise applications. Development of enhanced user experience in a multi-touch, multi-sensor (accelerometer, gyroscopes, camera, geo-location) environment. Understanding of software development environments and testing tools, and use of wireless connectivity and data in mobile applications. Development of or extension of a modest application based on a major mobile platforms (iOS, Windows Phone 7, or Android). (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: Reading references posted on the Blackboard site. There is no suitable, recent textbook.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in development of mobile applications.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Introduction to mobile application architecture
2. Fundamentals of mobile platforms
3. Challenges/opportunities in mobile applications
4. Mobile operating systems
5. Evaluation of major mobile platforms in terms of features, functions, libraries and support
6. Enhanced user experience
7. Software integration with multi-touch, multi-sensor mobile platforms
8. Use of wireless connectivity and data in mobile applications
9. Software development environments
10. Software testing tools
11. Application design for gaming and multimedia
12. Application design for communications, entertainment
13. Application design for enterprise tasks
14. Development/extension of a modest application (in iOS/Android/Windows mobile)
15. Development/extension of a modest application

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CRYPTOGRAPHY
FALL 2014
EECS 480G

COURSE DESCRIPTION: This course begins with a discussion of how mobility-driven computing and communication systems use cryptography to protect data and protocols. The foundation for critical cryptographic concepts, techniques, and algorithms are covered. The fundamental cryptographic concepts are studied, including: symmetric encryption, public key encryption, digital signatures, cryptographic hash function, and message authentication codes; cryptographic protocols, such as key exchange, remote user authentication, and interactive proofs; cryptanalysis of cryptographic primitives and protocols, such as by side-channel attacks, differential cryptanalysis, or replay attacks; and cryptanalytic techniques on deployed systems, such as memory remanence, timing attacks, fault attacks, and differential power analysis. Techniques used for code making (cryptographic) and break codes (cryptanalytic) are covered, as well as how these techniques are used within larger security systems. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: *Understanding Cryptography: A Textbook for Students and Practitioners*, Christof Paar, Jan Pelzl, Bart Preneel, Springer, 2010.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in cryptography.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Introduction Cryptography
2. Classical Encryption Techniques
3. Block Ciphers and the Data Encryption Standard
4. Finite Fields I: Groups, Rings, and Fields
5. Finite Fields II: Modular Arithmetic
6. Finite Fields III: Polynomial Arithmetic
7. Finite Fields IV: Finite Fields of the Form $GF(2^n)$
8. AES: The Advanced Encryption Standard
9. Using Block and Stream Ciphers for Secure Wired and WiFi Communications
10. Key Distribution for Symmetric Key Cryptography and Generating Random Numbers
11. Prime Numbers and Discrete Logarithms
12. Public-Key Cryptography and the RSA Algorithm
13. Certificates, Certificate Authorities, and Digital Signatures
14. Elliptic Curve Cryptography and Digital Rights Management
15. Cryptoanalysis

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SOFTWARE SECURITY
FALL 2014
EECS 480H

COURSE DESCRIPTION: This course begins with discussions of good software engineering practices to ensure security in modern software systems and additional challenges to security due to code mobility in software for mobility-driven computing. The basics of software security and threat models, methods to protect software (operating systems, databases, distributed software)—including risk analysis, authentication and authorization, access control, and software architecture for security—are studied. Principles of secure coding, validation and verification of secure software, software and data watermarking, code obfuscation, tamper resistant software are studied, as well as the benefits of open source and closed source software. Use of software as an attack mechanism and emerging attack models (including joint hardware-software attacks) are studied. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: *Software Security: Building Security In*, Gary McGraw, Addison-Wesley, 2006. Also, <https://engineering.purdue.edu/kak/compsec/Lectures.html>

COURSE OBJECTIVES: This course is designed to provide a strong foundation in software security.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLY COURSE SCHEDULE:

1. Introduction to software security; Hashing for Message Authentication
2. TCP/IP Vulnerabilities
3. DNS and the DNS Cache Poisoning Attack

4. Firewalls
5. PGP, IPsec, SSL/TLS, and Tor Protocols
6. The Buffer Overflow Attack
7. Malware: Viruses and Worms
8. Port and Vulnerability Scanning, Packet Sniffing, Intrusion Detection, and Penetration Testing
9. Dictionary Attacks; Rainbow-Table Attacks
10. Security Issues in Structured Small-World Peer-to-Peer Networks
11. Web Security: PHP Exploits and the SQL Injection Attack; Cross-Site Scripting and Other Browser-Side Exploits
12. Bots and Botnets
13. Mounting Targeted Attacks with Trojans and Social Engineering—Cyber Espionage
14. Filtering Out Spam
15. Embedded Software Security Issues; Bus snooping Attacks and Embedded Software Infection

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HARDWARE SECURITY
FALL 2014
EECS 480K

COURSE DESCRIPTION: This course begins with the keys to enabling secure, trustworthy operation of computer hardware—understanding security issues and how appropriate security measures are included during design, verification, test, and deployment. Increasingly the security primitives such as the Trusted Computing Module are being introduced at the hardware level to prevent the compromise of security in systems being deployed today. A comprehensive coverage of security issues in computer hardware is provided. Topics of embedded systems security, hardware Trojans, security in implantable medical devices, security in RFID/NFC, protection from side channel attacks, tamper resistance and crypto processor design, trusted FPGA design/JTAG, hardware-based cryptanalysis, and hardware IP protection against piracy and reverse-engineering are covered. A course project (*Can you Hack It?*) that challenges students to hack a hardware is included. (3 credit hours)

FACULTY: The faculty of this program are with the EECS department. Their appointments follow the standard processes of internal review.

TEXTBOOK: *Introduction to Hardware Security and Trust*, Mohammad Tehranipoor and Cliff Wang, Springer 2012.

COURSE OBJECTIVES: This course is designed to provide a strong foundation in hardware security.

CLASS TIME / LOCATION: Once a week, 6:00 to 7:00 PM PDT live online. Additionally, 90 to 120 minutes per week of video-recorded lectures on Blackboard.

OFFICE HOUR / LOCATION: The hour before class, online. Also, by appointment.

COURSE GRADE:

Exams (30%): 3 Exams, 1 every 3-4 weeks

Homework (40%): 4 assignment, ~ biweekly

Project (30%): Building on the homework to integrate and instill the learning experience.

WEEKLEY COURSE SCHEDULE:

1. Hardware Security and Its Relation to Testing
2. Hardware Implementation of Hash Functions
3. RSA: Implementation and Security
4. Security Based on Physical Unclonability and Disorder
5. Hardware Metering: A Survey
6. Secure Hardware IPs by Digital Watermark
7. Physical Attacks, Tamper Resistance; Side Channel Attacks and Countermeasures, including Microcontrollers
8. Trusted Design in FPGAs
9. Security in Embedded Systems
10. Security for RFID Tags
11. Memory Integrity Protection
12. Trojan Taxonomy and Hardware Trojan Detection
13. Design for Hardware Trust
14. Security and Testing
15. Protecting IPs Against Scan-Based Side-Channel attacks

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**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

Proposed by Drs. Simon Peck and Thomas M. Nosek November 13, 2013

Revised February 2, 2014

Revised February 13, 2014

Revised and Tracked February 19, 2014

Revised April 4, 2014

This document contains a proposal for a dual degree program between the Department of Physiology and Biophysics (MS in Medical Physiology, Plan B) and the Weatherhead School of Management (MBA degree)

I. Background and Justification

The Department of Physiology & Biophysics at Case Western Reserve University offers the MS in Medical Physiology program that caters to college graduates that strengthens their academic backgrounds prior to applying to medical school, dental school, graduate school, or other health professions programs and/or to enrich their credentials for the job market. The Weatherhead School of Management offers its MBA program which is recognized as an innovative approach to Management education and builds on a foundation of core skills to prepare graduates for what's happening in business right now. The dual degree program will prepare students to participate in the fields of medical research and management, health care management, as well as give students an opportunity to develop expertise in areas of substantive interest. Moreover, dual degree students will be more likely to have greater job opportunities that are at the intersection of translational science and business/health care. No additional courses or resources are anticipated to fulfill the respective schools' obligations in administering the joint degree program.

II. Administration

Weatherhead School of Management Liaison: Dr. Simon Peck, Associate Dean of MBA Programs & Associate Professor of Strategy

Medical Physiology Liaison for the School of Medicine: Dr. Thomas M. Nosek, Professor and Director of the MS in Medical Physiology program for the Department of Physiology & Biophysics.

III. Program Structure

If one were to acquire the MBA and MS degrees independently, it would require the completion of 60 hours for the MBA program and 30 hours for the MS program (a total of 90 credit hours). In the dual degree program, cross counting allows for a reduction in the total number of class hours to 66 credit hours for both degrees as described below. The 60 credit hour and 30 credit hour numbers are for the independent programs as accredited through the Board of Regents in Columbus.

The proposed dual degree would require students to complete a total of 66 credit hours. For the MS in Medical Physiology part of the dual degree, students are required to complete 18 credit hours of coursework. These 18 hours constitute the one year core curriculum of the program. The

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

remaining 12 hours of elective courses required for the stand-alone MS degree would be satisfied by accepting 12 hours of course work from the MBA program.

1. 3 of these credit hours will be the required core MBA course MBAC 511, Statistics & Decision Modeling
2. The remaining 9 hours will be taken from the following MBA, 3 credit hour electives:
 - a. ECON 421, Health Economics & Strategy
 - b. MGMT464, Business Ethics
 - c. MGMT 467, Commercialization & Intellectual Property Management aka FUSION
 - d. OPMT 420, Six Sigma and Quality Management
 - e. OPMT 450, Project Management
 - f. OPRE 411, Optimization Modeling
 - g. OPRE 432, Computer Simulation
 - h. OPRE 433, Probability, Forecasting & Statistics
 - i. OPRE 435B, Integrated Problem Solving in OR and SC
 - j. ORBH 403, Developing Interpersonal Skills for Managers
 - k. ORBH 450, Executive Leadership
 - l. ORBH 460, Women in Organizations
 - m. ORBH 491, Managing Diversity and Inclusion

For the MBA part of the dual degree, students would have to complete 48 credit hours of graduate level course work at Weatherhead School of Management. While the students are enrolled in the WSOM part of the program, they will be on a leave of absence from the MS in Medical Physiology program. The remaining 12 hours of elective courses required for the stand-alone MBA degree would be satisfied by accepting 12 hours of course work from the MS program (the two, 6 credit hour Medical Physiology I PHOL 481 and II PHOL 482 courses). Therefore, a student saves 24 hours of course work by doing the dual degree program rather than each program separately. The dual degree program will require 5 semesters to complete. In the first year of the dual degree program, the students will be required to complete 18 credit hours of required/mandatory MS in Medical Physiology core courses over 2 semesters. This will be followed by three semesters of required/mandatory management core courses and electives (48 credit hours).

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

Proposed Curriculum

| FALL #1 (9 credit hours) MS Program | | SPRING #1 (9 credit hours) MS Program | |
|---|--|---|--|
| PHOL 481 | Medical Physiology I (6 cr. hr) | PHOL 482 | Medical Physiology II (6 cr. hr) |
| PHOL 483 | Translational Physiology (2 cr. hr) | PHOL 484 | Translational Physiology (2 cr. hr) |
| PHOL 499 | Physiology Seminar (1 cr.hr) | PHOL 499 | Physiology Seminar (1cr.hr) |
| FALL #2 (18 credit hours) MBA Program | | SPRING #2 (18 credit hours) MBA Program | |
| ACCT 401 | Financial & Managerial Accountancy (3 cr. hr.) | MBAC 507 | Operations & Supply Chain Mgmt (3 cr. hr) |
| MBAC 504 | Corporate Finance I (3 cr. hr) | MBAC 508 | Strategic Issues & Applications (3 cr. hr) |
| MBAC 512 | Economics (3 cr. hr) | MBAC 506 | Marketing & Supply Chain (3 cr. hr) |
| MBAC 515 | Leading People and Organizations (3 cr. hr) | MBAC 517 | Mgmt Perspectives & Dialogues (3 cr. hr) |
| MBAC 511 | Statistics & Decision Modeling (3 cr. hr) | ELECT 1 | Elective 1 (3 cr. hr) |
| MIDS420/ORBH 430 | Design in Management/Institute in Sustainable Value (3 cr. hr) | MIDS420/ORBH 430 | Design in Management/Institute in Sustainable Value (3 cr. hr) |
| SUMMER # 2 – INTERNSHIP MBA Program (Strongly Recommended) | | | |
| FALL #3 (12 cr.hr) MBA Program | | | |
| ELECT 2 | Elective 2 (3 cr. hr) | | |
| ELECT 3 | Elective 3 (3 cr. hr) | | |
| ELECT 4 | Elective 4 (3 cr. hr) | | |
| ELECT 5 | Elective 5 (3 cr. hr) | | |

Refer to section XI for the approved list of electives available at the Weatherhead School of Management).

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

IV. Dual Degree Curriculum Summary

Students interested in completing the dual degree should apply to both programs and consult both programs early in the process to avoid difficulties.

The Curriculum has 3 parts:

- 1. Core MS in Medical Physiology program (18 credit hours)**
- 2. Core + 1 Business Elective from Weatherhead School of Management (36 credit hours)**
- 3. Electives from Weatherhead School of Management (12 credit hours)**

Credit Hour Minimum Requirements

| | |
|---|----|
| Total Hours in the Business School: | 48 |
| Total Hours in the Medical School: | 18 |
| Total Hours in the Dual Degree Program: | 66 |

Dual Degree Requirements

- ✓ Maintain a greater than 3.0 GPA in the 18 credit hours of MS in Medical Physiology courses and the 12 elective hours accepted from the MBA program (see the list of courses that are accepted as MS in Medical Physiology electives above)
- ✓ Pass the Physiology and Neurophysiology National Board examinations (taken after completion of the core physiology courses)
- ✓ Maintain a 2.5 GPA or higher in Weatherhead courses
- ✓ Maintain C or higher grade in WSOM core courses.

Additional academic policies of each school will be followed and can be discussed with the respective liaison of the programs.

V. Dual Degree Student Advising System

For the MS in Medical Physiology portion of the dual degree program, the Director of the MS in Medical Physiology program, Dr. Thomas M. Nosek, will serve as the Academic Advisor and Dr. Joseph LaManna, a member of the MS in Medical Physiology Administration Committee, will serve as the Career Advisor.

In the Weatherhead School of Management, dual degree students will be advised by the Associate Dean of MBA Program – Dr. Simon Peck.

Twice a year, immediately after the end of the fall and spring semesters, or more frequently if necessary, the Associate Dean of MBA Programs at the WSOM and the Director of the MS in Medical Physiology Program of the Department of Physiology and Biophysics will meet to discuss the progress of all students in the program. Students performing unsatisfactorily in the MBA or the MS components of the program or both, will be given warning that they will have one semester to

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

show substantial improvement. If not, they will be dismissed from the component(s) in which they are performing poorly.

VI. Admissions

Target enrollment in the program is 15 or more students, achieved by admission of at least 5 students annually. Students wishing to enroll in the dual degree program must be separately admitted to each program and should express their interest in the dual degree program at the time of application. The Weatherhead School of Management will waive the GMAT requirement for admission to the MBA program and use the MCAT/DAT or GRE scores as used in the MS Medical Physiology Program admissions process. Once the program is up and running, students will be able to submit a joint application to the Department of Physiology and Biophysics, which will forward materials of students who are admissible to that program, to the WSOM for their consideration. Once students have been admitted, they will consult with the Department of Physiology & Biophysics Academic Advisor and Associate Dean for MBA Programs at the Weatherhead School of Management to determine their appropriate course of study. Students in the MS in Medical Physiology program may also apply to the joint program during their first year of studies.

VII. Tuition Revenue Mechanics

A Memorandum of Agreement about the management of tuition revenues will exist between the School of Medicine and the Weatherhead School of Management. Because the MS/MBA students will begin in the MS program in the School of Medicine, all 66 credit hours of tuition will be paid by the student at the “market rate” charged by the Medical School (currently ~\$1,660/credit hour). The Weatherhead School of Management will request reimbursement from the Medical School for 48 credit hours of tuition at the “market rate” charged by the Weatherhead School of Management (currently ~\$1,466/credit hour). The home base for the students will be the Department of Physiology and Biophysics in the School of Graduate Studies.

VIII. Approval Signatures:

| | |
|--|---|
| Dean, Weatherhead School of Management <i>Dr. Robert E. Widing</i> | X |
| Chair, Department of Physiology and Biophysics <i>Dr. Walter F. Boron</i> | X |
| Dean, School of Medicine <i>Dr. Pamela B. Davis</i> | X |
| Dean, School of Graduate Studies Dr. Charles Rozek | X |

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

IX. Student Activities:

Both the Dean for MBA Programs of the WSOM and the MS/MBA Academic Advisor in the Department of Physiology and Biophysics will regularly contact students in the program by email with information about activities and to verify proper progress.

Students are encouraged to participate in regular WSOM and Department of Physiology and Biophysics activities as well as other activities targeted to them. Under the direction of the Associate Dean for MBA Programs of the WSOM, all MBA students enrolled in dual degree program will meet bi-annually in a colloquium retreat (approximately one-half day in length). The purposes of the retreat are (1) to ensure the programs are meeting the expectations of the students and the faculty in charge, (2) to capture the benefits of the interdisciplinary experience, (3) to socialize the dual degree students as a group, instead of small groups of isolated students, and (4) to explore the intellectual and professional challenges of doing interdisciplinary work.

In addition, prior to registration, the Associate Dean of MBA Programs meets with each dual degree student to review their schedule and to explore any other issues on which they need guidance and advice. All new dual degree students will be partnered with two experienced students (constituting a Peer Advisory System) to address questions the students may have about the program and life as a graduate student at Case. These students will initially be drawn from the ranks of WSOM and Physiology and Biophysics MS students, but when the program is up and running, from advanced dual degree MS/MBA students. A get-acquainted dinner will be organized during registration week in the fall to facilitate this process. It is strongly recommend that first year students have a monthly activity with their peer advisors.

Other appropriate activities for the MS/MBA students include attending the weekly Departmental Seminar and Student Seminars, as well as annual named lectureships, participating in annual retreats. All dual degree students are required to attend the yearly Department of Physiology and Biophysics retreat (typically held in October) and are encouraged to attend the yearly picnic, baseball outing, and December Holiday party as well as participate in the twice-monthly Friday "Happy Hours" in the department.

X. Advantages of the Joint Degree Program

There are several advantages to the students in the MS/MBA program. The key advantage will be that the students will develop a unique focus on their studies in each of the two disciplines. In addition, the usual Master's of Science in Medical Physiology is a two year program but the students in the joint degree program will be able to complete the program requirements in just 9 months (2 semesters) beyond the time required for obtaining the MBA degree which is reduced from the typical 4 semesters to 3 semesters. Students will take a total of 24 fewer credit hours of courses by completing the dual degree program rather than satisfying the requirements for the two program independently.

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

XI. Weatherhead School of Management Elective Courses

Dual degree candidates are required to take 18 credit hours from the following list of elective courses.

| | |
|-------------------|---|
| ACCT 403 | Survey of Accounting |
| ACCT 414 | Corporate Reporting & Analysis |
| ACCT 418 | Fraud, Governance and Reporting |
| ACCT 431 | Tax Practice: Analysis, Planning and Communications |
| ACCT 480 | International Tax |
| ACCT 495 | Advanced Accounting Seminar: Taxation & Wealth Transfer |
| ACCT 495 | Advanced Accounting Seminar: Taxation & Pers Fin Planning |
| ACCT 495 | Advanced Accounting Seminar: Tax Reporting & Nonprofits |
| ACCT 495 | Advanced Acct. Seminar – Val. Of Tax Liabilities |
| ACCT 495 | Advanced Acct. Seminar – Forensics & Fraud |
| BAFI 403 | Financial Management |
| BAFI 404 | Financial Modeling |
| BAFI 427 | Green Finance |
| BAFI 428 | Financial Strategy & Value Creation |
| MSFI 430/BAFI 430 | Derivatives of Risk Management |
| BAFI 440 | Advanced Corporate Finance |
| BAFI 444 | Entrepreneurial Finance |
| BAFI 450 | Mergers & Acquisitions |
| BAFI 480 | International Financial Management |
| BLAW 417 | Legal Environment for Managers – MBA |
| ECON 421 | Health Economics & Strategy |
| ENTP 419 | Entrepreneurship and Personal Wealth Creation |
| ENTP 428 | Entrepreneurship & Innovation |
| ENTP 444 | Entrepreneurial Finance |
| LHRP 431 | Negotiation for Managers |
| MGMT 440 | Leadership Assessment and Development II |
| MGMT 464 | Business Ethics |
| MGMT 467 | Commercialization & Intellectual Property Management aka FUSION |
| MIDS420 A & B | Design in Management: Concept and Practices |
| MKMR 405 | Business Marketing |
| MKMR 408 | Marketing Metrics |
| MKMR 411 | Customer Relationship Management |
| MKMR 421 | Marketing Value Creation |
| OPMT 420 | Six Sigma and Quality Management |
| OPMT 450 | Project Management |
| MKMR/OPMT 475 | Supply Chain Logistics |

**Proposal for Dual MS (Medical Physiology)/MBA. Degree Program
Case Western Reserve University**

| | |
|----------------|---|
| MKMR/OPMT 476 | Strategic Sourcing |
| OPMT 477 | Enterprise Resource Planning in the Supply Chain |
| OPRE 402 | Stochastic Models with Applications |
| OPRE 411 | Optimization Modeling |
| OPRE 432 | Computer Simulation |
| OPRE 433 | Probability, Forecasting & Statistics |
| OPRE 435B | Integrated Problem Solving in OR and SC |
| ORBH 403 | Developing Interpersonal Skills for Managers |
| ORBH 430 A & B | MBA Institute In Sustainable Value and Social Entrepreneurship I & II |
| ORBH 450 | Executive Leadership |
| ORBH 460 | Women in Organizations |
| ORBH 491 | Managing Diversity and Inclusion |
| PLCY 419 | Entrepreneurship and Personal Wealth Creation |
| PLCY 425 | Chief Executive Officer |
| PLCY 494 | Managerial Consultancy |

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- Vanderbilt
- Purdue University
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- Columbia University
- Stanford
- **Case Western Reserve (MBA)**
- M.I.T.
- George Mason University
- University of Virginia
- Cornell
- UC Berkeley
- Purdue
- Northeastern University
- Boston University
- Ohio State



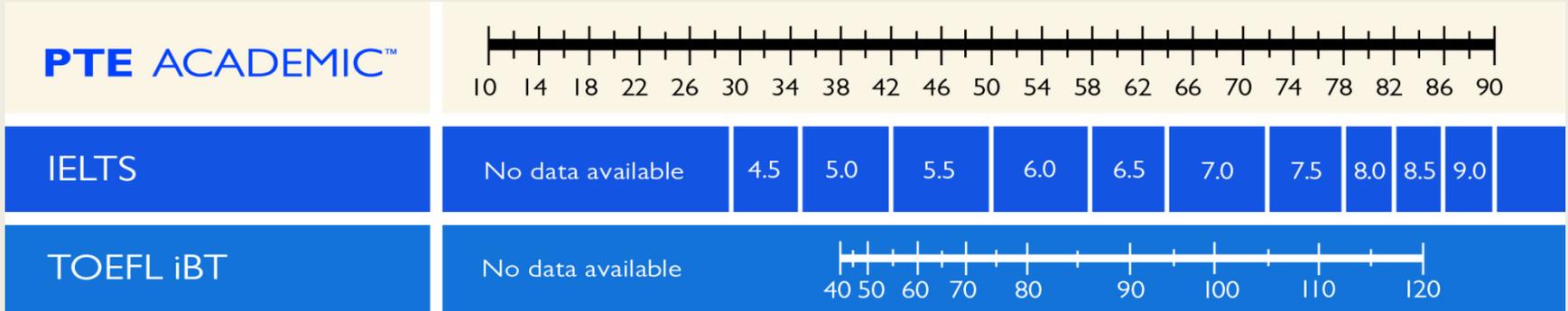
PTE Academic, the smallest Standard Error of Measurement (SEM)
 - the range within which the true score lies

| TEST | SEM | EXAMPLE SCORE | ROUNDED FROM | MIN | MAX | | 95% INTERVAL |
|--------------|-------------------|---------------|--------------|-----|-----|-----------|--------------|
| PTE Academic | 2.32 ² | 59 | 58.5-59.4 | 54 | 64 | 10 points | 10 points |
| TOEFL iBT | 5.28 ³ | 87 | 86.5-87.4 | 76 | 98 | 22 points | |
| TOEFL on PSE | | 59 | | 51 | 67 | | 16 points |
| IELTS | 0.22 ⁴ | 6.5 | 6.25-6.74 | 5.8 | 7.2 | 1.4 band | |
| IELTS on PSE | | 59 | | 47 | 68 | | 21 points |

Converts to

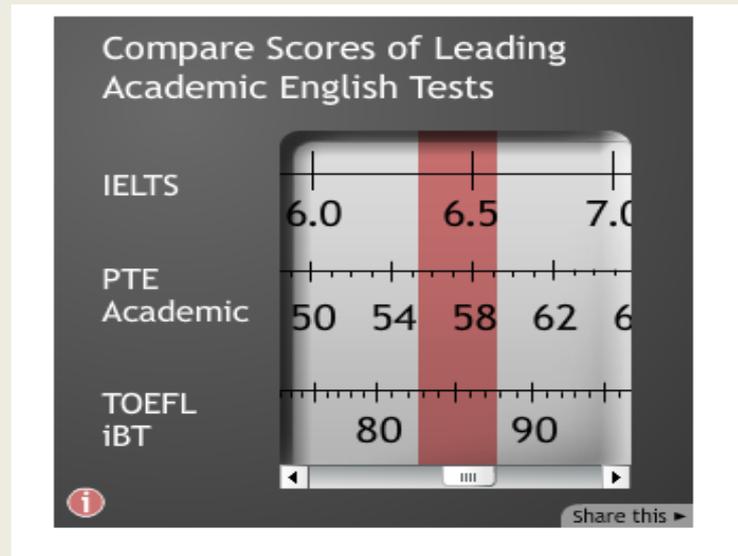
| | 2xSEM | RANGE | SCORE OF 59 |
|--------------|-----------|---------|--|
| PSE | | | 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 |
| PTE Academic | 10 points | 54 - 64 |  |
| TOEFL iBT | 16 points | 51 - 67 |  |
| IELTS | 21 points | 47 - 68 |  |

Cut Score Concordance



• Instant analysis can be found here:

• <http://pearsonpte.com/PTEAcademic/Pages/TestScores.aspx>



Extracurricular Life and Class Attendance Resolution

As a University, we value students' total educational experience, including its curricular, co-curricular, and extracurricular components. The Student Life Subcommittee of the Faculty Senate Committee on Undergraduate Education encourages all Departments (academic and other) to minimize the scheduling during established class meeting hours of events at which student participation is required or desired, including but not limited to extra class meetings, athletics, arts programs, and other organized activities. When conflicts exist, all parties (students, faculty, and staff) should work together so that the student can meet his or her academic obligations and participate in extracurricular events. If agreement about an appropriate accommodation cannot be reached, the student's obligations to classes meeting on their posted schedules will take priority.

To facilitate planning, all courses (including ROTC, varsity sports, and music ensembles) should post, to the extent possible, the full set of meeting times in SIS before students register for their courses. This will allow students to work with their faculty to resolve conflicts before the start of the semester. Should it be impossible or impractical to record specific obligations in SIS before students register, a student should alert each of his or her instructors before the end of the drop/add period of conflicts that will occur during the semester in order to develop a plan to resolve the conflicts, including the possibility of making adjustments to course enrollments.

In addition, all faculty should be aware that Undergraduate Studies and the Department of Physical Education and Athletics have developed guidelines for coaches, who are themselves members of the faculty, to administer exams for other courses to their team members while the team is traveling to participate in a competition.

FSCUE CURRICULUM SUBCOMMITTEE PROTOCOL FOR COURSE AND PROGRAM ACTION FORMS FROM NON-UPF SCHOOLS

According to the Faculty Handbook's charge to the FSCUE, "The Committee on Undergraduate Education shall review and recommend to the Faculty Senate with respect to ... curricula, contents, and standards for newly-proposed undergraduate degree programs; changes in existing undergraduate curricula and degree programs within a constituent faculty that specifically influence undergraduate degree programs or students enrolled in undergraduate degree programs in other constituent faculties (the provost, or the provost's designee, in consultation with the chair of the Committee on Undergraduate Education will decide which course action forms require review by the committee);" In addition, "All proposals for undergraduate courses and programs must be submitted for appropriate review through at least one of the four UPF Constituent Faculties."

In compliance with this charge, the FSCUE Curriculum Subcommittee will review all course and program action forms from non-UPF schools of the University, including requests for one-term approval for new courses. The process shall be:

1. All course and program action forms from non-UPF units, including supporting information, should be sent to the Dean of Undergraduate Studies. The Dean of Undergraduate Studies will review the forms for completeness and request missing information that can be identified in advance of a full review.
2. The Dean of Undergraduate Studies will forward the materials to the appropriate UPF school(s) with a written request for review by and comment from the body designated with the school(s).¹
3. The UPF school(s) will be given six weeks from when the materials are forwarded to it (not including the period between Commencement and the start of fall classes, the period between the end of fall semester exams and the start of the spring semester, or spring break) to respond in writing to the Dean of Undergraduate Studies. Any desired consultations with departments or programs that may be impacted by a new course or program should be part of the review by that (those) UPF school(s) and included in the response provided to the Dean of Undergraduate Studies. A response may include a request for additional time to complete a review, but the approval of that extra time will be a matter for the FSCUE Curriculum Subcommittee. A UPF school may also request to review the proposed action a second time after the non-UPF school has responded to its initial comments (see

¹ NOTE: Course action forms from Biochemistry and Nutrition will go directly to the FSCUE Curriculum Subcommittee for consideration following whatever process exists in the School of Medicine without first being referred to one of the UPF Constituent Faculties because these departments are part of the Undergraduate Program Faculty. However, the College of Arts and Sciences must approve program action forms from these departments, as well as from Economics (housed in the Weatherhead School of Management) and from Computer Science (housed in the Case School of Engineering) when relevant to the Bachelor of Arts major because these departments offer majors toward the CAS Bachelor of Arts degree. Similarly, while course actions from Physics will be reviewed in the College of Arts and Sciences, the Case School of Engineering must approve program actions for the Engineering Physics major toward the Bachelor of Science in Engineering degree. All course and program action forms from Physical Education will go directly to the FSCUE Curriculum Subcommittee, as this unit is part of the UPF.

#5 below). The absence of a response by the designated date will be taken as consent to the proposed course or program action.

4. The comments received from the UPF school(s) will be shared with the unit proposing the course or program action for response and/or modification of the proposal.
5. If the original comments from a UPF school include a request to review the proposal again after response and/or modification, the UPF school will be given a second opportunity to comment on the proposal. Four weeks, as defined above, will be provided for this second round of comments.
6. The course or program action form and supporting documentation, along with written comments received from the UPF school(s), will be shared with the FSCUE Curriculum Subcommittee for review. The FSCUE Curriculum Subcommittee may take action on the proposal, refer it to the FSCUE for action, or send it back to the unit proposing the course or program for additional information or consultation. If additional consultation is requested, the unit proposing the action will be expected to undertake and document that consultation.
7. The UPF school(s) that reviewed the proposal will be informed of the action taken.
8. At any point in the process after the reviews by the UPF school(s) described above, the FSCUE Curriculum Subcommittee may choose to seek additional review and comment from one or more UPF schools, but no more than two rounds of review within a UPF school is guaranteed.
9. When a course action form is approved by the FSCUE Curriculum Subcommittee, the unit proposing the course will be informed by the Dean of Undergraduate Studies that the form has been forwarded to the Registrar's Office. Similarly, when a program action form for changes to an existing minor is approved by the FSCUE Curriculum Subcommittee, the unit proposing the action will be informed by the Dean of Undergraduate Studies that Undergraduate Studies will record the changes in the Academic Requirements module of SIS.
10. When a program action form for a new minor is approved by the FSCUE Curriculum Subcommittee, the unit proposing the action will be informed that the proposal is being forwarded for subsequent review by FSCUE *en route* to the Faculty Senate.
11. At any point in the process, the FSCUE Curriculum Subcommittee may choose to refer a course or program action form to the FSCUE should the Subcommittee determine that the proposed action requires more formal review.

The curriculum committees of the UPF Constituent Faculties generally meet once per month from September to May. This drives the timing described in this document, and means that the review process for course or program action forms submitted in the spring semester may not be completed until the following fall semester.

Faculty Senate 2013-2014

April 24, 2014

Professor Sandra Russ, CAS, Chair

Professor Robert Savinell, CSE, Vice-Chair

Professor Robin Dubin, WSOM, Past-Chair

Rebecca Weiss, Secretary of the University Faculty

Goals for 2013-2014

- 5-year review of Faculty Handbook and Faculty Senate By-laws
- Course evaluation form revisions
- Communication among Faculty Senate, schools, and faculty

Faculty Senate Activities-Progress on Goals

Faculty Handbook Revisions

- Revisions to grievance procedures
- Consultation procedure for changing department names
- Clarification of emeritus appointment procedures
- Appointments outside constituent faculties
- Procedural issues for Senate elections
- Numerous suggestions for revisions sent to appropriate committees for work next year.

Course Evaluations

Revised Course Evaluation form for undergraduate courses approved at February Faculty Senate meeting

Major change is that this form is short- 3 main questions and comments section. Instructors can add questions.

Implementation Committee has been appointed and will work over the summer. Plan is for fall implementation.

Communication Among Senate, Schools, and Faculty

In general, working well with ExCom representative communicating with schools.

- Clarifying on which school/college committee the representative to the Senate Executive Committee sits.
- Newsletter (by Rebecca Weiss) very helpful in communicating with faculty

New Programs and Department Name Changes

- School of Dental Medicine: closing of Department of Oral Pathology; renaming of Department of Oral Diagnosis and Radiology
- WSOM Minor in Leadership
- CAS Minor in Creative Writing
- LAW Executive MA in Financial Integrity
- SOM MS in Medical Physiology Off-Site Program

New Programs Continued

- PhD Program in Clinical Translational Science
- Rename Chemical Engineering Department

Other Activities

Feedback and Discussion on Interim Sexual Misconduct Policy

Approved International Agreement Approval Form

Working on Overlapping Course Content Policy

THANK YOU!!

ON TO NEXT YEAR!!