

CURRICULUM VITAE

Professor Pascal St-Amour



Contact

Professor Pascal St-Amour
Faculty of Business and Economics (HEC Lausanne)
and Swiss Finance Institute
University of Lausanne
Internef 520
CH-1015 Lausanne
Switzerland
Pascal.St-Amour@unil.ch
<http://www.hec.unil.ch/pstamour/>
Tel.: (41) 21.692.34.77
Fax.: (41) 21.692.34.35

Education

1990-1995

Ph. D., Economics (June 1995)
Queen's University
Kingston, Ontario, Canada
Specialisation : Econometrics, Money and Banking

1986-1989

M.A., Économies (June 1989)
McGill University
Montréal, Québec, Canada
Specialisation : Economic History

1982-1986

B.A., Economics, (Nov. 1986)
McGill University
Montréal, Québec, Canada

Work experience

2004-

Professeur ordinaire (full) : Macro (Bachelor, Masters.), Pub. Fin.(Bachelor), Financial Theory (Ph.D.)
Département d'Econométrie et Economie Politique (DEEP)
Faculty of Business and Economics (HEC)
Université de Lausanne
Batiment Extranef
CH-1015 Lausanne
Suisse
Supervisors : Marius Brühlhart, Thomas Von Ungern, Lorenz Götte

April 2008-December 2008

Vice-Dean Research and Doctoral School
Faculty of Business and Economics (HEC)
Université de Lausanne
Batiment Extranef
CH-1015 Lausanne
Suisse

August 2007-April 2008

Department Head
Département d'Econométrie et Economie Politique (DEEP)
Faculty of Business and Economics (HEC)
Université de Lausanne
Batiment Extranef
CH-1015 Lausanne
Suisse

2003-2004

Visiting Professor : Int. Macro, Macro Policy workshop (Bachelor).
École des Hautes Études Commerciales
Université de Lausanne
Route de Chavannes 33
CH-1007 Lausanne
Suisse
Supervisor : Jean-Pierre Danthine

2000 - 2004

Associate Professor : Finance workshop, Financial Theory (Masters)
Service de l'enseignement de la finance
École des Hautes Études Commerciales
3000, Ch. Côte Ste-Catherine,
Montréal, QC
H3T 2A7

Canada

Supervisors : Pierre Laroche, Louise Séguin-Dulude

1999-2000

Assistant Professor : Portfolio Management (Bachelor), Financial Theory (Masters)

Service de l'enseignement de la finance

École des Hautes Études Commerciales

Supervisor : Pierre Laroche

1994-1999

Assistant Professor : Macroeconomics (Ph.D.), Financial and Monetary Economics (Ph.D., Masters); Economic History, Money and Banking, Macroeconomics (Bachelor).

Département d'Économie

Pavillon J.-A. De Sève

Université Laval

Québec (Québec)

CANADA G1K 7P4

Supervisors : Gérard Gaudet, Jean-Thomas Bernard, Marc Van Audenrode.

1992-1994

Lecturer : Macro, Econ Problems and Policies (Bachelor).

Institut d'économie appliquée

École des Hautes Études Commerciales (Montréal)

Supervisor : Denyse Dagenais

1990-1992

Teaching Assistant (T.A.) : Quant. Methods (Masters); Econ. History, Econometrics (Bachelor)

Economics Department

Queen's University (Kingston, Ontario)

Supervisors: B. Raj, Allan Green et Tony Smith.

Research Assistant (R.A.)

Economics Department

Queen's University (Kingston, Ontario)

Supervisor : Professeur J.G. MacKinnon

1990

Economist

Luc Michaud inc. Économistes Conseils/Logiciels Experts

Supervisor : Luc Michaud

1986-1988

Teaching/Research Assistant (T.A./R.A.) : Intro. Economics, Econ Hist. (Bachelor)

McGill University, Montréal

Supervisor : Antal Deutsch et R.T. Naylor.

Research and Teaching Interests

- ⤴ Health Economics
- ⤴ Financial Economics
- ⤴ Applied Econometrics
- ⤴ Macroeconomics
- ⤴ Economic History

Research Groups

- ⤴ Swiss Finance Institute (SFI), Fellow (Fall 2006).
- ⤴ Financial Asset Management and Engineering (FAME) Fellow (September 2004).
- ⤴ Centre Interuniversitaire sur le Risque, les Politiques Économiques et l'Emploi (CIR-PÉE). Fellow, Finance Group (June 2002).
- ⤴ Centre Inter-universitaire de Recherche en Analyse des Organisations (CIRANO). Fellow, Finance Group (June 2001).
- ⤴ Groupe de Recherche en Économie et en Finance (GRÉFI). HEC-Montréal. Fellow, Finance Group (June 1999).

Publications

- ⤴ Pelgrin, Florian, and Pascal St-Amour, “Life Cycle Responses to Health Insurance Status”, *Journal of Health Economics*, **49**, September 2016, 76-96.
- ⤴ Julien Hugonnier, Florian Pelgrin, Pascal St-Amour: “Health and (other) Asset Holdings”, *Review of Economic Studies*, **80**(2), April 2013, 663-710.
- ⤴ Dionne, Georges, Pascal St-Amour and Désiré Vencatachellum, «Asymmetric Information and Adverse Selection in Mauritian Slave Auctions», *Review of Economic Studies*, **76**(4), October 2009, 1269-1295.
- ⤴ Normandin, Michel and Pascal St-Amour, «An Empirical Analysis of U.S. Aggregate Portfolio Allocations», *Journal of Banking and Finance*, **32**(8), August 2008.
- ⤴ Normandin, Michel and Pascal St-Amour, “Recursive Measures of Total Wealth and Portfolio Return”, *Applied Financial Economics*, **15**(4), February 15, 2005, 287-291.
- ⤴ Gordon, Stephen and Pascal St-Amour, ‘Asset returns and State-Dependent Risk Preferences’, *Journal of Business and Economic Statistics*, **22**(3), July 2004, 241-252. Lead paper.
- ⤴ Chenny, Shirley, Pascal St-Amour and Désiré Vencatachellum, «Slave Prices from Succession and Bankruptcy Sales in Mauritius, 1825--1827», *Explorations in Economic History*, **40**(3), October 2003, 419-442.
- ⤴ Breton, Michèle, Pascal St-Amour and Désiré Vencatachellum, «Dynamic production teams with strategic behavior», *Journal of Economic Dynamics and Control*, **27**(5), March 2003, 875-905.
- ⤴ Normandin, Michel and Pascal St-Amour, «Canadian Consumption and Portfolio Shares» *Canadian Journal of Economics*, **35**(4), November 2002, 737-756.
- ⤴ Gordon, Stephen and Pascal St-Amour, «A Preference Regime Model of Bear and Bull Markets», *American Economic Review*, **90**(4) September 2000, 1019-1033.

- ▲ Breton, Michèle, Pascal St-Amour and Désiré Vencatachellum, "Birds of a feather: Teams as a Screening Mechanism", Proceedings of the 8th International Symposium on Dynamic Games and Applications. Maastricht, the Netherlands July 1998, p. 116-124.
- ▲ Normandin, Michel and Pascal St-Amour, «Substitution, Risk Aversion, Taste Shocks and Equity Premia», Journal of Applied Econometrics, 13, 265-281, 1998.
- ▲ Chevet, Jean-Michel and Pascal St-Amour, «L'intégration du marché du blé en France aux XVIII^e et XIX^e siècles, Cahiers d'Économie et Sociologies Rurales, 22, 151-175, 1992.
- ▲ Chevet, Jean-Michel and Pascal St-Amour, «L'intégration du marché du blé en France au XIX^e siècle.» Histoire et Mesures, I ½, 93-119, 1991.
- ▲ St-Amour, Pascal, «Les fluctuations des prix du blé lors des crises de subsistance», Cahiers d'Économie et Sociologie Rurales, 21, 25-44, 1991.

Working papers and manuscripts

- ▲ Hugonnier, Julien, Florian Pelgrin, and Pascal St-Amour, "Self-Inflicted Unemployment Scarring and Stigma", Manuscript, Faculty of Business and Economics, University of Lausanne, May, 2017.
- ▲ Hugonnier, Julien, Florian Pelgrin, and Pascal St-Amour, "Valuing Life at Gunpoint", Manuscript, Faculty of Business and Economics, University of Lausanne, May, 2017.
- ▲ Hugonnier, Julien, Florian Pelgrin, and Pascal St-Amour, "Closing Down the Shop: Optimal Health and Wealth Dynamics Near the End of Life", Manuscript, Faculty of Business and Economics (HEC), University of Lausanne, July, 2016.
- ▲ Mesquida, Yannis, and Pascal St-Amour, "Healthy and Thrifty Enough for the Long Run?", Manuscript, Faculty of Business and Economics (HEC), University of Lausanne, July, 2016.
- ▲ Pascal St-Amour, *Human Capital and Employment Risks Hedging*, Swiss Finance Institute Research Paper 15-18, 2015.
- ▲ Julien Hugonnier, Florian Pelgrin, Pascal St-Amour: A Structural Analysis of the Health Expenditures and Portfolio Choices of Retired Agents, March 2010, manuscript, Faculty of Business and Economics, University of Lausanne.

Bursaries

2013-2017

Swiss Finance Institute "Life Cycle Financial and Health-related Allocations", 300'000.- joint with Julien Hugonnier (EPFL) and Florian Pelgrin (UNIL)

2007-2008

Swiss National Science Foundation "Health and Assets", 44'763.-, joint with Florian Pelgrin (ULausanne) and Pierre-Thomas Léger (HEC-Montreal)

2003-2004

National Center of Competence in Research (NCCR), Suisse.

2003-

Centre Inter-universitaire de Recherche en Politique Économique et Emploi (CIRPÉE), bourse FQRSC, Gouvernement du Québec, Équipe de recherche HEC.

2003-

Conseil de recherches en sciences humaines du Canada, Groupe de Recherche en e-Finance. Équipe de recherche HEC.

2002

Prix Gaëtan Morin en recherche, associate professor..

2002-2008

Bourse Programme des Regroupements Stratégiques, Fonds de Recherche sur la Société et la Culture, Québec. Centre Interuniversitaire sur le Risque, les Politiques Économiques et l'Emploi, Universités Laval, UQAM, HEC Montréal, Concordia et McGill.

2000-2003

Social Sciences and Humanities Research Council, Canada, with S. Gordon, «Total Wealth and Asset Prices».

1997-1999

Social Sciences and Humanities Research Council, Canada, with S. Gordon, L. Samson et B. Carmichael, «Risk Preferences and Asset Prices».

1994

Fonds de démarrage, Université Laval.

1991

W.E. McLaughlin Fellowship (Royal Bank of Canada)

1988-1989, 1991

Boursier INRA Groupe III, Institut National de la Recherche Agronomique, Station d'Économie et Sociologie Rurales, Paris.

1989

Newcomen Award (conjoint), Newcomen Society of the U.S., pour meilleure communication en Histoire Économique, McGill University.

Conferences/seminars

- ▲ “Valuing Life at Gunpoint”
 - Dept. of Economics, HEC Montreal, May 2017.
- ▲ “Closing Down the Shop: Optimal Health and Wealth Dynamics Near the End of Life”:
 - Econometric Society European Meeting, Lisbon (P), Aug. 21-25, 2017.
 - NETSPAR International Pension Workshop, Leiden (NL), Jan 17-20, 2017.
 - European Workshop on Econometrics and Health Economics, Nyborg (DK), Sept. 2016.
- ▲ “Self-Inflicted Unemployment Scarring” and “Human Capital and Employment Risks Diversification”
 - Society of Labor Economics Annual Meeting, Raleigh, NC (USA), May 2017.
 - Econometric Society, European Meeting, Geneva (CH), August 2016.
 - Dept of Economics, Laval University, (Canada).
 - University of Lausanne, April 2015.
 - SFI Research Days, Gerzensee (CH), June 2015.
- ▲ “Life Cycle Responses to Health Insurance Status”:
 - NETSPAR International Pension Workshop, Leiden (NL), January 2016.
 - Health and Inequality Conference, Le Mans, (F), December 2015.
 - Econometric Society, World Congress, Montreal (Canada), August 2015.
 - 14èmes Journées Louis-André Gérard-Varet Conference in Public Economics, Aix-en-Provence, June 2015.
 - European Workshop on Econometrics and Health Economics, Starnberg (D), Sept. 2014.
 - Annual Health Econometrics Workshop, Toronto (Canada), October 2014.

- European Health Economics Workshop, Lausanne, June 2014.
- HEC Montréal Finance Seminar, November 2013.
- Goette Universität, Frankfurt, Finance Seminar November 2013.
- NETSPAR Pension workshop, Amsterdam, January 2013.
- Toulouse School of Economics, Macro seminar, April 2013.
- ▲ “Health and (other) Asset Holdings”:
 - CEPR European Summer Symposium in Financial Markets, Gerzensee, July 2011.
 - European Finance Association, Stockholm (presented by F. Pelgrin)
 - European Winter Finance Summit, Saalbach-Hinterglemm, Salzburg, Austria, March 2010.
 - Netspar Pension workshop, Amsterdam, January 2010.
 - Household Finance and Macroeconomics Conference, Banco de España, Madrid, October 2009.
 - Econometric Society European Meeting (ESEM), Barcelona, August 2009.
 - 20th European Summer Symposium in Financial Markets (ESSFM, informal evening presentation), Gerzensee, July 2009.
 - Joint TSE-DEEP-CIRPEE Conference, Toulouse School of Economics, June 2009.
 - Joint Lunchtime Seminar (JLS) series of CFS, ECB and Deutsche Bundesbank, Frankfurt, February 2009.
 - Computational and Financial Econometrics Meetings, Neuchatel, June 2008.
 - Swiss Society for Economics and Statistics, Lausanne, March 2008.
- ▲ ‘Benchmarks in Aggregate Household Portfolios’:
 - Seminar, University of Birmingham, November 2007.
 - NYKREDIT Symposium on Housing, Mortgage and Portfolio Choice, Copenhagen Business School (DK), Septembre 2007.
 - Royal Economic Society, University of Warwick (GB), April 2007.
- ▲ ‘Direct Preferences for Wealth in Aggregate US Household Portfolios’:
 - Econometric Society European Meeting, Vienna, August 2006.
 - Canadian Economic Association, Montreal Canada, May 2006.
 - 9th Conference of the Swiss Society for Financial Market Research, SWX Swiss Exchange, Zürich, April 2006.
 - Finrisk Risk and Portfolio Management Seminar, SWX Swiss Exchange, Zürich,, January 2006.
- ▲ ‘Ratchet vs Blasé Investors and Asset Market’:
 - European Financial Asset Management Conference, Basel Switzerland, July 2004.
 - CEMAF/ISCTE Finance Conference, Lisbon, Portugal, 16-17 March 2004.
- ▲ ‘Slave Prices from Succession and Bankruptcy Sales in Mauritius, 1825-1827’,
 - Allied Social Sciences, 2-5 January 2003, Washington DC.
- ▲ ‘Aggregate Consumption and Portfolio Shares : Evidence and Theory’,
 - Conférence CIRANO Macro Finance, Montréal, June 2003.
- ▲ 'Reputation in Elective Production Teams':
 - Society for Computational Economics, Yale University, June 2001 (presented by D. Venkatachellum).
 - Center for Nonlinear Dynamics in Economics and Finance Workshop on Economic Dynamics, University Van Amsterdam, January 2001 presented by D. Venkatachellum).
- ▲ 'Total Wealth, Consumption and Portfolio Shares : Evidence and Theory',
 - North American Summer Meetings of the Econometric Society, June 2001.
 - 14th Congress of the Canadian Macroeconomic Study Group, Hamilton, November 2000.

- ♣ 'Asset Prices with Contingent Risk Preferences',
 - 12th Congress of the Canadian Macroeconomic Study Group, Montréal, November 1998.
 - North American Summer Meetings of the Econometric Society, Montréal, June 1998 (presented by Stephen Gordon).
- ♣ 'Birds of a Feather : Teams as a Screening Mechanism',
 - Meetings of the Society for Economic Dynamics, University of Pennsylvania, Philadelphia, PA, June 1998.
- ♣ 'Families, Insurance and Employment in Developing Agricultural Economies':
 - Meetings of the Society for Economic Dynamics, Oxford University, UK, June 1997 (presented by Désiré Vencatachellum).
- ♣ 'State-Dependent Risk Aversion and Asset Prices':
 - Meetings of the Northern Finance Association, Université Laval, September 1996.
 - Congress of the European Economics Association, Prague, September 1995 (presented by Stephen Gordon).
- ♣ 'Wheat Prices Volatility in Nineteenth Century France',
 - Conference on Canadian Economic History, Vancouver, BC, October 1992.
- ♣ 'Wheat Market Integration in Nineteenth Century France',
 - Meetings of the European Economic History Association, Copenhagen, Denmark, July 1991.

Ad-hoc referee

- ♣ Journal of Health Economics
- ♣ Review of Finance
- ♣ Review of Economic Studies
- ♣ Review of Financial Studies
- ♣ Journal of Banking and Finance
- ♣ Journal of Risk and Insurance
- ♣ Review of Finance
- ♣ Quantitative Economics
- ♣ Canadian Journal of Economics.
- ♣ American Economic Review.
- ♣ Economic Journal.
- ♣ International Game Theory Review
- ♣ Economics Letters
- ♣ Journal of Applied Econometrics
- ♣ Spanish Economic Review
- ♣ Southern Economic Journal

Other

- ♣ Organizer Walras-Pareto Conference, Prof. Philippe Aghion (LSE, Harvard), with A. Kuldelski (InnoSuisse), M. Mermod-Schule (Sophia Genetics), Philippe Leuba (Conseil d'Etat, VD), and Fatih Derder (Conseiller national), May 2017.
- ♣ Program Committee, Econometric Society European Meeting, 2016, 2017.
- ♣ Program Committee, European Finance Association, 2015, 2016, 2017.
- ♣ Program Committee, European Financial Management Association, 2016.
- ♣ Member and Head, PhD Economics Committee, University of Lausanne.
- ♣ Member Recruitment Committee ETH Zürich.
- ♣ Referee for Social Sciences and Humanities Research Council, Canada.
- ♣ Referee for Fonds de Formation des Chercheurs et Aide à la Recherche (FCAR), Québec.

Student supervision

- ⤴ Audrey Ledermann, “Taux d’Intérêt Négatifs: Impacts Economiques et Financiers – Le Cas de la Banque Cantonale de Genève”, MScE, University of Lausanne, co-director, July 2016.
- ⤴ Patrick Helbling, MScE, University of Lausanne, “Scarring and Stigman Effects of Job Displacement: US Evidence from the Displaced Worker Survey”, June 2016.
- ⤴ Yannis Mesquida, PhD, University of Lausanne, “Retirement and Health-Related Decisions over the Life Cycle”, current, May 2015.
- ⤴ Julien Blatt, MScF, University of Lausanne, ‘Impact of Health-Related Shocks in the Context of a Dynamic Asset Pricing Model’, June 2014.
- ⤴ Avdyl Ramaj, MScE, University of Lausanne, ‘Economic Analysis and Policies on tobacco Consumption’, February 2014.
- ⤴ Louis Alain Signé, Ph.D. University of Lausanne, ‘Studies on the Interactions between Health and Financial Allocations’, co-director, Completed September 2014.
- ⤴ Stefano Puddu, Ph.D. University of Lausanne, ‘Essays on Rational Bubbles’, May 2012.
- ⤴ Xiyuan Li, ‘The High Reserve Holding in China: What’s is the Explanation’, MSc, University of Lausanne, September 2011.
- ⤴ Pascal Anderegg ‘Impact on Banking of Regulation Reform in OTC Derivatives Market’, MSc, University of Lausanne, June 2011.
- ⤴ Yun Wu, ‘Testing US-East Asian Risk Preferences with CCAPM’, MSc, University of Lausanne, June 2010.
- ⤴ Line Barmaz, ‘Tax Competition among Swiss Cantons’, MSc, University of Lausanne, June 2010.
- ⤴ Sylviane Chassot, ‘Household Price Elasticity of Electricity’, MSc, University of Lausanne, June 2010.
- ⤴ Marcel Probst, ‘The Business Cycle, Health, and Wealth: A Dynamic Analysis for the USA’, MSc, University of Lausanne, June 2010.
- ⤴ Maki Bissig, MScE, University of Lausanne, ‘The Impact of Decentralization on Economic Growth: An Analysis of the Transmission Channels’, director, completed June 2007.
- ⤴ Sarah Jacquier, MScE, University of Lausanne, ‘The Energy Market in Switzerland’, director, completed June 2008.
- ⤴ Ivan Jaccard, Ph.D. University of Lausanne, ‘Asset Pricing, Real Estate Markets and the Business Cycle: A General Equilibrium Approach’, director, completed 2006. European Central Bank.
- ⤴ Van M. Bui, MSc, University of Lausanne, ‘An Empirical Analysis of the Relation between Debt and Growth in Developing Countries’, supervisor, completed 2005.
- ⤴ Mandjé Touré, M.Sc. HEC-Montréal, ‘Efficience Allocative et Organisationnelle des Association Rotatives d’Épargne et de Crédit’, supervisor, completed, 2005.
- ⤴ Octave Tetiali, M.Sc. HEC-Montréal, ‘Richesse Totale et Prix des Actifs: Le Cas Canadien’, supervisor, completed, 2003.
- ⤴ Badye Omar Essid, M.Sc. HEC-Montréal, ‘Modèle asymétrique non linéaire à transition lisse (ANST-GARCH) appliqué aux données canadiennes’, supervisor, completed, 2003.
- ⤴ Emilia Gabriele, M.Sc., HEC-Montréal, ‘Instruments Obligataires Brady : Modélisation et Évaluation Empirique’, co-supervisor, completed, 2003.
- ⤴ Simon Dumesnil, M.Sc. HEC-Montréal, ‘Modèles multifactoriels en contexte international’, supervisor, current, 2003.

- ⤴ Hubert Rybicki, M.Sc. HEC-Montréal, 'L'effet de l'introduction des options sur le rendement et le volume des contrats à terme: Une analyse empirique', supervisor, completed, 2003.
- ⤴ Carl Veilleux, M.Sc., HEC-Montréal, 'La Valeur Informationnelle du Volume de Transactions: Une Étude sur des Données Intraday du NASDAQ-100', supervisor, completed, 2002.
- ⤴ Iannick Forrest, M.Sc., HEC-Montréal, 'Négociations de Contrats à Terme sur des Obligations à Long-Terme en Contexte Intra-Jour', co-supervisor, completed, 2002.
- ⤴ Shirley Cheney, M.Sc., HEC-Montréal, 'Déterminants du Prix des Escalves à l'Île-Maurice au XIXe Siècle'. co-supervisor, completed, 2001.
- ⤴ Pierre Gilbert, M.Sc., Université Laval, 'Valorisation des Actifs Financiers avec Mesure de Richesse Agrégée', supervisor, completed, 1998.
- ⤴ Marc Sirois, M.Sc., Université Laval, 'Déviations à la Parité Non Couverte des Taux D'Intérêt entre le Japon et les États-Unis', supervisor, completed, 1998.
- ⤴ Denis Tremblay, M.Sc., Université Laval, 'La Zone Monétaire Canadienne', supervisor, completed, 1997.

PhD Thesis committee

- ⤴ Zhiyong Huang, 'Validity of and Correction for Self-report Measures in Survey', UNIL, May 2017, Internal Expert.
- ⤴ Michael Ingenhaag, 'Essays in Economics of Aging', UNIL, Sept. 2013, Internal expert.
- ⤴ Marc-Jean Martin, 'Soldes Financiers des Collectivités Publiques : Explications Théoriques et Modélisation Simultanée des Recettes et Dépenses des Cantons Suisses'. ID-HEAP, September 2006, director : Nils Soguel, external expert.
- ⤴ Aleksandar Georgiev, 'Three Essays in Financial Economics : Asset Pricing, Optimal Portfolio Selection and Financial Integration', HEC Université de Lausanne, May 2006, director : Jean-Pierre Danthine, internal expert.
- ⤴ Olivia Huguenin, 'Topics in Public Finance : Social Security and Taxation', HEC Université de Lausanne, director : Monika Buetler, internal expert, March 2006.
- ⤴ Bruno Powo Fosso, 'Dynamique du Compte Courant et Différentiel de Taux d'Intérêt', HEC Montreal, June 2005, director : Michel Normandin, external expert.
- ⤴ Xiangrong Jin, 'Essays on Asset Pricing and Asset Allocations', HEC Université de Lausanne, May 2005, director : Jean-Pierre Danthine, internal expert.

Teaching

BSc in Economics

- ⤴ Public Finance 3rd year, Spring semester.
- ⤴ Macro II 3rd year, Fall semester.

MSc in Economics and MSc in Finance

- ⤴ Macro Finance 2nd year, Fall semester.

PhD in Finance (SFI, until 2010)

- ⤴ Asset Pricing 1 1st year, Fall semester.